Pediatric obesity screening and treatment guidelines: A quality improvement project

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Abstract

Background & Significance: Pediatric obesity rates have doubled in the last three years, making it one of the most common pediatric chronic diseases. Childhood obesity has significant negative impacts on long term health including hyperlipidemia, non-alcoholic fatty liver, sleep apnea, etc. The American Academy of Pediatrics (AAP) has published updated guidelines in an effort to decrease rates of obesity. However, pediatric primary care centers with limited resources have found it difficult to align with best practices. As rates of obesity are on the rise, implementation of evidence-based screenings and treatment are crucial in primary care.

Purpose: The aim of this QI project was twofold, improve SHC staff confidence, knowledge, practices in obesity management and implement a standardized approach to identify and provide evidence- based treatment.

Method: A educational session that reviewed weight terminology, weight stigma & bias, and the AAP obesity guidelines was provided to primary care staff. A clinical pathway chart with evidence-based screening and treatment guidelines was provided to staff.

Results: Confidence scores showed a 25% increase as “somewhat confident” in post-education scores and a 17% decrease in “not confident” compared to pre-education survey scores. A 42% increase in “strongly agree” to feeling well prepared to treat obesity in post-education surveys.

Discussion/Conclusion: Primary care centers must take action to standardize and implement evidence-based practices in efforts to combat increasing rates of childhood obesity. Efforts should be made to increase provider confidence and knowledge by providing education, training, and standardizing practice.

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Problem Description

Pediatric obesity in the United States (US) has reached epidemic levels with a prevalence that has doubled in children and tripled in adolescents in the last 3 decades, making it one of the most common pediatric chronic diseases (Hampl et al., 2023; Haqq et al., 2021; Sanyalou et al., 2019). It is estimated that obesity affects more than 107 million children worldwide, nearly 17% of children in the US, with about 14.4 million cases (Haqq et al., 2021; Sanyalou, et al., 2019). The prevalence of obesity is highest among non-Hispanic Black and Mexican American youth and youth from low-income and low-education households (Resniscow, et al., 2024). In 2020-2021 nearly 32% of youth between 10-17 years of age in the state of Oregon were overweight or obese (America's Health Rankings, 2023). In Multnomah County, 26% of eighth-grade students and nearly 24% of 11th-grade students are overweight or at risk of becoming overweight (CDC, 2013).

Pediatric obesity is a chronic disease that is characterized by an excess of adipose tissue and defined as a body mass index (BMI) greater than or equal to >95th percentile for age and sex and overweight is a BMI between 85th and 95th percentile (Sanyalou, et al., 2019). Obesity is a complex multifactorial health disease influenced by genetics, environment, and psychosocial factors. Children with obesity are more likely to remain overweight as adolescents and into adulthood; placing them at an increased risk of long-term health risks that include cardiovascular disease, hypertension, hyperlipemia, non-alcoholic fatty liver disease, menstrual disorders, diabetes, sleep apnea, cancers, and early mortality (Haqq et al., 2021; Resniscow, et al., 2024; Sanyalou, et al., 2019). Additionally, mental health concerns including depression and reduced self-esteem, are commonly reported in children with obesity (Haqq et al., 2021). The American Academy of Pediatrics (AAP) has published updated guidelines to combat the growing rates of

obesity among children. Pediatric primary care centers, including student health centers (SHC) in the Pacific Northwest, are no exception in encountering the surge of overweight and obese pediatric patients. However, difficulty aligning with recent evidence-based practices for children with obesity has become difficult for pediatric primary care clinics such as SHCs with limited resources. As rates of obesity are on the rise, the implementation of evidence-based screenings and treatment as published by the AAP has become crucial.

Available knowledge

Research on the benefits and risks associated with obesity in children is extensive, although the literature on best practices for addressing, managing, and preventing obesity continues to evolve. Nevertheless, the benefits of addressing obesity are becoming increasingly evident. An extensive literature review consisting of longitudinal studies, mixed-methods studies, a randomized control trial (RCT), systematic reviews, and meta-analyses was performed. Included in this literature review is the updated guidelines by the AAP.

The AAP guidelines strongly advise the evaluation and management of pediatric obesity with components of the comprehensive obesity treatment model (COT). The essential components of COT include the treatment of obesity as a chronic disease that is delivered by the primary care home. The primary care team must evaluate for obesity, evaluate comorbidities, obtain appropriate lab work, and assess social determinants of health. Providers must practice patient-centered care and provide evidence-based nutrition and physical activity guidance (AAP, 2023). Motivational interviewing (MI) is a patient-centered counseling style that identifies and reinforces a patient's motivation for change, which has been shown to decline BMI percentiles (AAP, 2023). Lastly, the AAP suggests the implementation of an intensive health behavior

lifestyle treatment program (IHBLT) as a holistic approach made up by the primary care provider, RN, BH, dieticians, and physical therapy in reducing and/or preventing excessive weight gain in children who are 6 years or older.

Johnson et al., (2023) highlights the challenges that pediatric primary care centers face with the implementation of obesity guidelines in the clinical setting. An electronic survey was distributed to pediatric primary care providers to understand knowledge, experience, and barriers to care. Of those surveys collected commonly perceived barriers included limited time, clinician-perceived family resistance, culturally appropriate care, environmental factors, limited knowledge of community resources, and lack of clinical support. MI was identified as a skill that providers requested more training in due to its effectiveness in weight management, eating behaviors, and improvement in pertinent labs. MI training for clinicians, dieticians, registered nurses, etc. is a suggested intervention to increase provider confidence in the management of overweight or obese patients. However, many primary clinics often do not staff dietitians and if so, the hand-off/referral process may be complex or non-existent, creating a barrier to access for both providers and families (Johnson et al., 2023). Adequate staffing with training and standardization of the hand-off/referral process within the clinical setting is imperative to the effectiveness and utilization of support staff while increasing family engagement in follow-up care (Johnson et al., 2023). Additionally, effective utilization of support staff can address clinician-identified barriers of “limited time,” “perceived family resistance,” and “inadequate collaborative support” (Johnson et al., 2023). Implementation of obesity guidelines is vital to the primary care home, but efforts need to be made to better integrate practical strategies and educational opportunities to meet the needs of primary care providers and their patients.

Similarly, a mixed methods study examined the views of pediatric primary care providers on obesity management and identification to both improve and standardize obesity management across primary care clinics. Providers' survey responses identified four categories: provider knowledge and comfort, practice-based/systems-level barriers, parental level barriers (readiness for change), and environmental barriers (lack of community resources). System-level barriers included a lack of support personnel in the clinic to deliver obesity care such as referral coordinators, nurse case managers, and dieticians (Rhee et al., 2018). Clinical barriers included lack of time, provider knowledge, poor MI training, and low confidence in this type of care. In addition, providers identified the underutilization of the electronic medical record (EMR) to standardize obesity management. Providers identified that the EMR would help streamline care and ensure consistency between providers by the use of templated medical notes, standardized handouts, links to nutrition and physical activity assessments, and smart sets for labs, diagnosis codes, and community and subspecialty referrals. Rhee et al. (2018) highlight the continued difficulty providers face with providing consistent and standardized obesity management in the clinical setting.

Reyes et al., (2021) performed a study that assessed the relationship between obesity training and provider perception, clinical practice patterns, and confidence in the management of pediatric obesity. It was found that pediatric providers with more obesity training felt more successful and confident when treating obese or overweight patients and discussing treatment options. Providers with less training reported low confidence in discussing pharmacotherapy options, using MI, and discussing bariatric surgery. Providers also identified a lack of clinical support and community resources that create barriers to adequate obesity management. These perceptions align with current literature that reports limited geographic availability of obesity-trained pediatrics

providers and poor obesity management. Increased obesity training decreased knowledge gaps and improved comfort and confidence with treating overweight and obese patients.

Rationale

A root cause of analysis of local SHCs illustrated outdated and inconsistent obesity screening and treatment guidelines. An extensive literature review found that the primary care setting must address, screen, and provide evidence-based treatment. However, the literature also demonstrates the difficulty for primary care homes to align with best practices and challenges that make it difficult to meet the high demand of pediatric patients with overweight and obesity. The framework used for this quality improvement (QI) project is based on the Institutes for Healthcare Improvement (IHI) Model for improvement. The IHI model is widely adopted as the framework to guide QI projects due to its relatively low cost, and versatility, and has been proven to accelerate change in many healthcare settings (Institute for Healthcare [IHI], n.d). The key component of this model is the Plan-Do-Study-Act (PDSA) cycles that provide a structure to test proposed changes, gather knowledge, and make iterations to each cycle until the goal of a sustainable system change is achieved (Picarillo, 2018).

Specific Aim

The aim of this QI project was to improve SHC staff confidence, beliefs, and practices in obesity management and create standardization of obesity screening and management.

Context

The SHC is a federally qualified health center (FQHC) that is a primary care setting for school-aged children in Multnomah County. Nine SHC sites are located within high schools to increase access to school-aged youth. Nearly 31% of youth seen at SHC identify as Hispanic or Latino, 30% identify as white, and about 17% identify as Black/African American. Children aged 12-18 years of age make up nearly 76% of the patient demographics of the SHC. The SHC follows a no-out-of-pocket cost model intended to decrease potential financial barriers and increase access to healthcare for youth. The SHC healthcare teams consist of medical assistants, behavioral health consultants (BHC), mental health consultants, senior office assistants, community health workers, nurse practitioners, physician assistants, and a part-time registered nurse (RN).

The SHC experienced a dramatic decrease in visits during the peak of COVID-19, secondary to virtual schooling. Recent data shows a 15% increase in clinic visits compared to 2019, exceeding the pre-pandemic clinic visit numbers. The increase in clinic visits has led to increasing encounters of children with elevated BMIs. After the recent release of the updated AAP obesity guidelines, the SHC has identified an opportunity to standardize the approach to screening and treatment for obesity. The medical director has identified the need to standardize their workflow, implement the new obesity guidelines, and expressed support for the aims of this project. The SHC healthcare providers are eager to implement a standardized approach that aids in providing optimal care to their patients.

Current practice for addressing elevated BMIs is provider-driven, including addressing an elevated BMI, referring to an outside dietician, and referrals for healthy lifestyle interventions (HLI), in which there is no criteria in place for when to refer. The SHC utilizes an electronic

health record system in place to flag elevated BMIs. If a provider decides to address elevated BMIs with the patient, the patient may be referred to the registered nurse for HLI which is completed virtually, and lab work is completed. Before the HLI virtual visit, the patient is given a packet to complete before the first visit. This packet was created by a staff nurse and has not been reviewed for accuracy nor up to date on evidence-based practices. After the initial virtual visit with the RN, follow-up is patient dependent which can take weeks to months or lost to follow-up.

Intervention

This QI project included a 45-minute virtual interactive education session that addressed weight terminology, weight-related conversations, weight stigma and bias, MI, comorbidity screening, and evidence-based guidelines and treatment. Providers, BHCs, and RNs received this education during a mandatory meeting with paid protected time to prioritize participation in the curriculum and recognize the importance of the training. In attempts to facilitate engagement and discussion during the education segment, staff were asked to answer multiple questions anonymously using Poll Everywhere. Staff were provided with the electronic version of the presented material which included the PowerPoint presentation and clinical flow chart (see Appendix G). A de-identified confidence, beliefs, and practice electronic survey was distributed using Qualtrics® before the educational segment to providers, BHCs, and RNs (see Appendix F). A de-identified three-month follow-up post-education Qualtrics ®survey was distributed to re-evaluate staff SHC staff confidence, beliefs, and practice in obesity management (see Appendix F).

Study of the intervention

The study of this intervention included a pre-education survey and a three-month post-education follow-up survey measuring staff confidence, beliefs, and practices in obesity management. The electronic survey was based on surveys found in the literature. The survey was streamlined to 36 questions and a Likert scale was used for response options. The pre-education survey was distributed days before the education session by the medical director via electronic communication to staff to optimize completion of the survey. Following the education segment, staff were provided reminders to complete surveys and a QR code was shared to increase pre-education survey responses. Post-education surveys were distributed by the medical director 4 months after the education session which yielded low response rates.

Measures

The primary outcome measure for this project included improving staff confidence, beliefs, and practices in obesity management. A flow chart with updated obesity guidelines was distributed in efforts to standardize screening for obesity and its management, this was available to staff electronically and in a shared drive. As a balancing measure, an increasing visit capacity could place a heavier burden on the system and its staff members, including the RN, medical assistants, BHCs, and schedulers.

Analysis

The quantitative data was recorded in excel to evaluate beliefs, practice, and confidence. The mean scale score was used to measure central tendency and outcomes through a pre-post comparison. Descriptive statistics were used to report medical providers' years of experience in

primary care, educational preparation, role in practice, educational background, and full-time status in practice.

Ethical Considerations

The clinical staff were informed of the implementation of this QI project through employee emails, ensuring delivery of project details and voluntary participation. Staff members consented by completing pre- and post- assessment surveys which were de-identified to uphold confidentiality. This QI project was submitted to the Oregon Health and Science University (OHSU) Institutional Review Board (IRB) for review and determined to be non-human research. The QI project was also submitted to the Multnomah County Health Department project review team and approved. The clinic site signed a letter of support for this QI project to take place.

Results

Cycle one of the PDSA was initiated in October 2023 through February 2024 to assess staff confidence, beliefs, and practices in obesity screening and management. Due to scheduling conflicts the onset of PDSA cycle one was moved to a later date, as shown in Appendix A: Planned versus actual project timeline. Consequently, the didactic session was completed virtually instead of in person as originally planned.

Out of the 20 staff members who attended the education segment, 60% (12) completed pre-survey's, 10% partially completed pre-surveys (4), and 20% (4) completed post-surveys. Those who completed the pre-survey, 71% identified as advance practice providers (APPs), 7% RNs,

and 21% BHCs. Of these staff, 28% work as full-time status and 64% work part-time (0.6FTE) (refer to Appendix B). Post-survey respondents consisted of 100% identifying as part-time APPs.

This project looked at 3 themes, confidence, practice, and beliefs through the collection of quantitative data. Confidence scores showed a 25% increase as "somewhat confident" in post-education scores and a 17% decrease in "not confident" compared to pre-education survey scores. There was a 42% increase in "strongly agree" to feeling well prepared to treat obesity in post-education surveys. Although, there was a 25% increase in "not effective at all" in providing effective obesity treatment compared to pre- education survey data. In the practice category, post-survey scores showed a 30% increase in "somewhat likely" to refer to BH for weight-loss support and a 5% decrease in "extremely unlikely". Discussing pharmacotherapy to obese children resulted in similar answer distribution in both pre- and-post education survey data, favoring "extremely unlikely" in both sets. Post-education data showed a 57% increase in "somewhat likely" to refer to outside dieticians and no respondents answered, "extremely unlikely", pre-education data saw a 27% response rate.

Lastly, in the beliefs category, 54% "somewhat agree" that discussing weight is uncomfortable for patients and will only offer treatment options if the patient requests it. It is perceived that most overweight or obese patients are already aware of health impacts, nearly 58% of pre-survey and 50% of post-survey responded, "strongly agree", "agree", and "somewhat agree" with this statement. Furthermore, response rates for both pre- and post-education survey data showed perceived barriers to effective and evidence-based obesity management included lack of appointment time, lack of training, and poor confidence.

Summary

This project looked at 3 themes, confidence, practice, and beliefs through the collection of pre- and post-education surveys. The implementation of a 45-minute education session focusing on overweight/obesity care led to an overall improvement in care team level of confidence and level of preparedness to manage obesity. However, team members did not feel that they can effectively manage obesity. Practices also saw an improvement; the care team was more likely to refer to outside resources such as dieticians to support obesity/overweight management. Discussing pharmacotherapy saw no improvements and was "extremely unlikely" to be offered to patients. Pharmacotherapy was not a focus during the training session which should be a consideration for future trainings. Beliefs observed some small improvements but mostly unchanged from pre-education scores. It is important to note that care teams' perceptions and their own biases and stigma surrounding obesity can affect the care a patient will receive. Addressing biases and weight stigma was not the focus of this training and should be considered for future trainings. Care team perceived barriers to providing effective and evidence-based obesity management included appointment times, lack of obesity training, and low confidence.

Although this QI project did not meet its initial aim, a notable strength lies in the fact that a concise 45-minute training session resulted in recognition of the role that a primary care team has in recognizing/treating obesity and increasing the confidence of its team members. This highlights the project's efficacy in fostering positive change and raising awareness. The second aim of this project was not met. In order to create the standardizing of obesity care, the barriers identified by the care team must be addressed. Additionally, the use of the flow chart was not measured in this PDSA cycle.

Limitations

Limitations included a small number of participants and variability in response rates between the pre- and post-education surveys. Factors that might have introduced confounding and limited internal validity include weight-bias or stigma, as well as imprecision in the measurement tool, given that it relied on self-assessment. Other limitations include staff turnover, new BH staff months after the education session, and absence of an IHBLT. It is also important to acknowledge personal biases, assumptions, and personal expectations that may influence pediatric weight management. This training did not focus on weight bias, but this is an import consideration for future trainings. Efforts to mitigate and address limitations involved emails sent by administrative staff encouraging participation in both the pre- and post-surveys. Moving forward, a more effective approach could be to collect post-survey responses after the presentation to enhance data accuracy.

Conclusion

The standardization and practice of an evidence–based approach to obesity care begins with provider confidence, beliefs, and practice. Findings of this QI project reflects recent literature, although low participant response rate limits use of the findings for other similar clinics. Even though the aim of this project was not met, post-surveys showed improvements in both confidence and practice. Beliefs did not illustrate improvement but illustrates how providers own perceived beliefs may affect treatment and management. Future education should include raising

awareness of weight stigma to encourage unbiased clinical practices and pharmacotherapy management of obesity. These findings emphasize the need for further obesity training, mitigating weight bias, organizational support, and identifying resources in order to adequately care for children that are overweight or obese.

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Appendices

Appendix A

Figure 1. Confidence pre- and post-education survey data

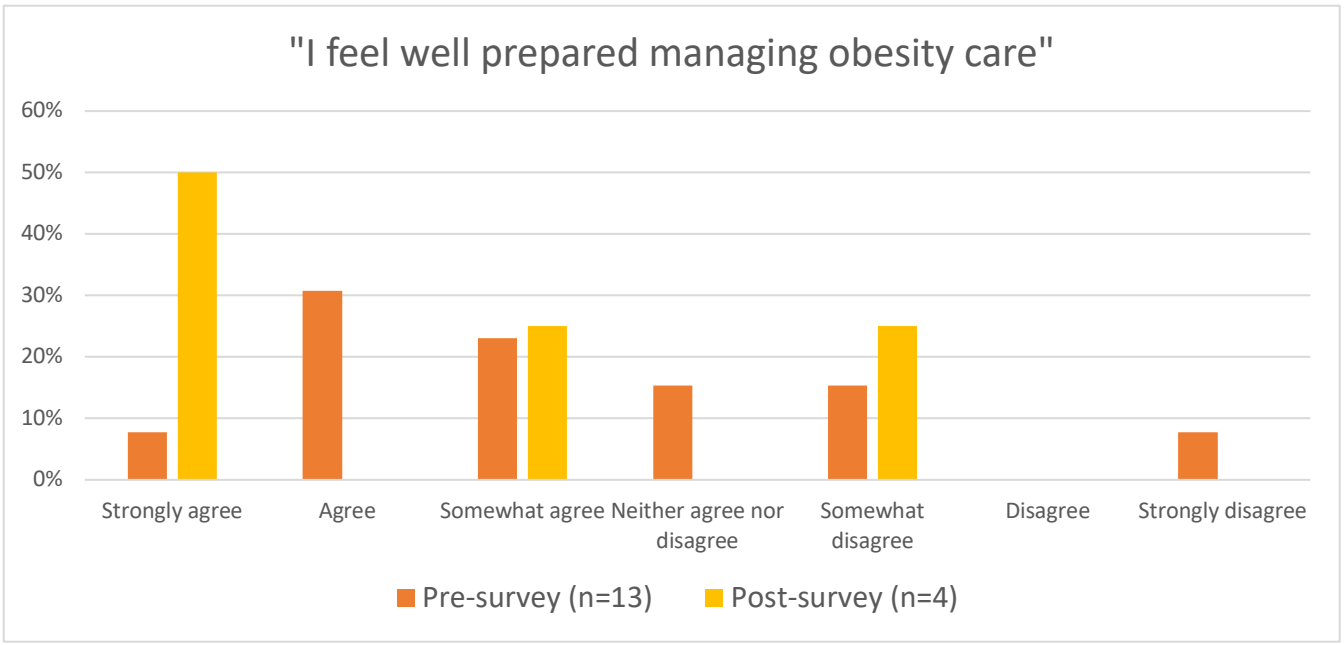


Figure 2. Confidence pre-and post-education survey data

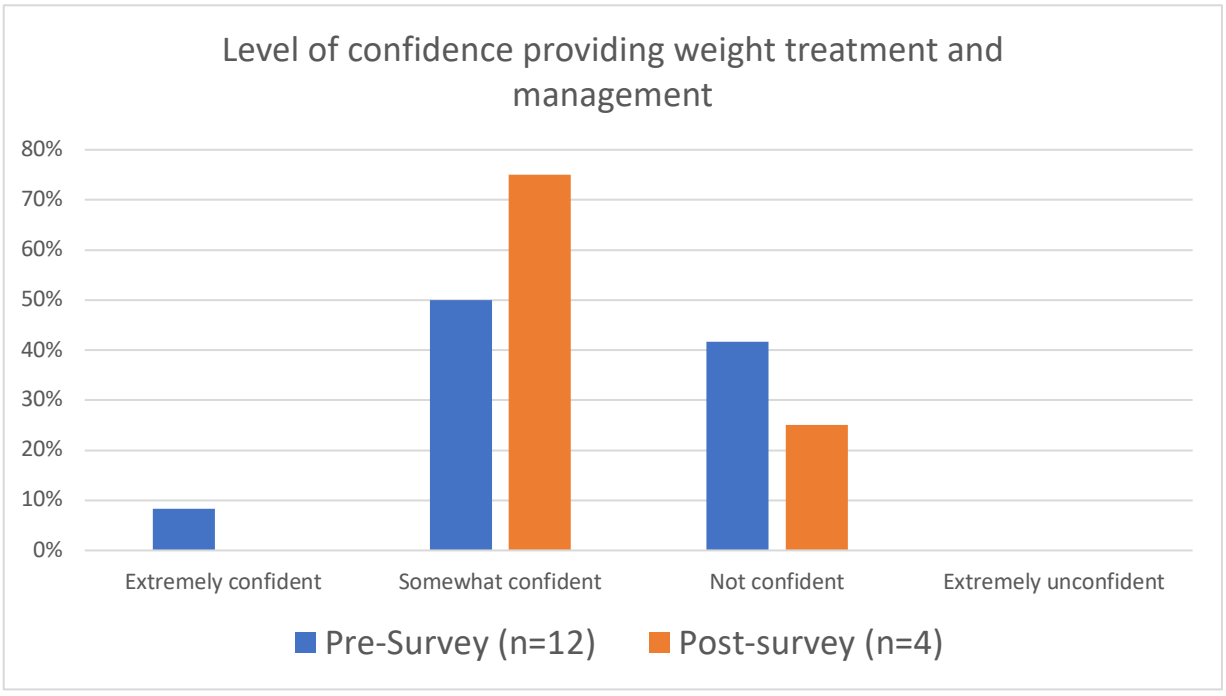


Figure 3. Practices pre-and post-education survey data

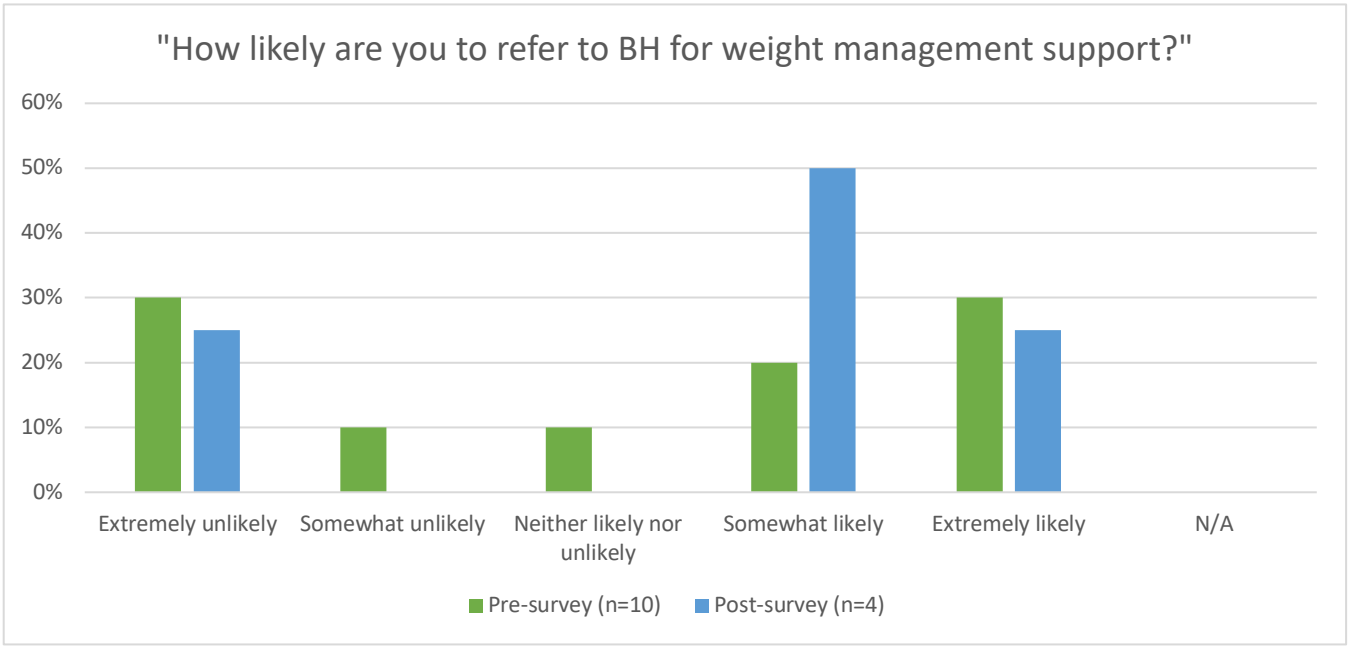


Figure 4: Beliefs pre-and post-education survey data

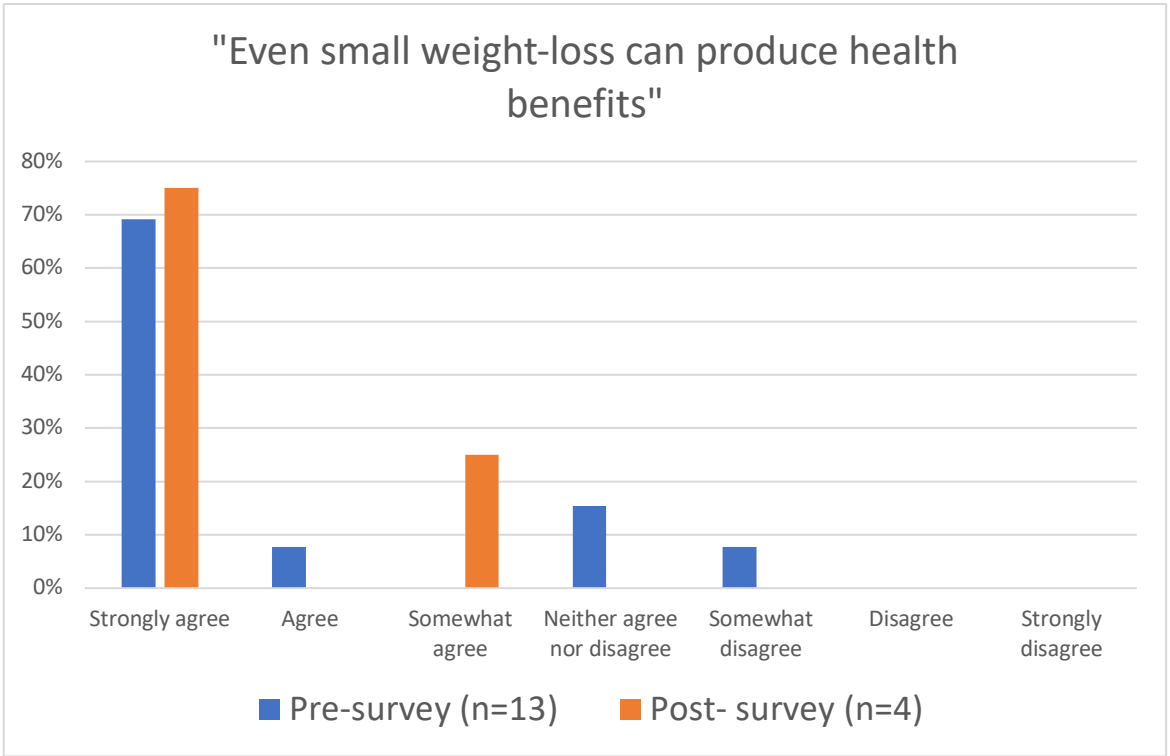


Figure 6: Beliefs pre-and post-education data

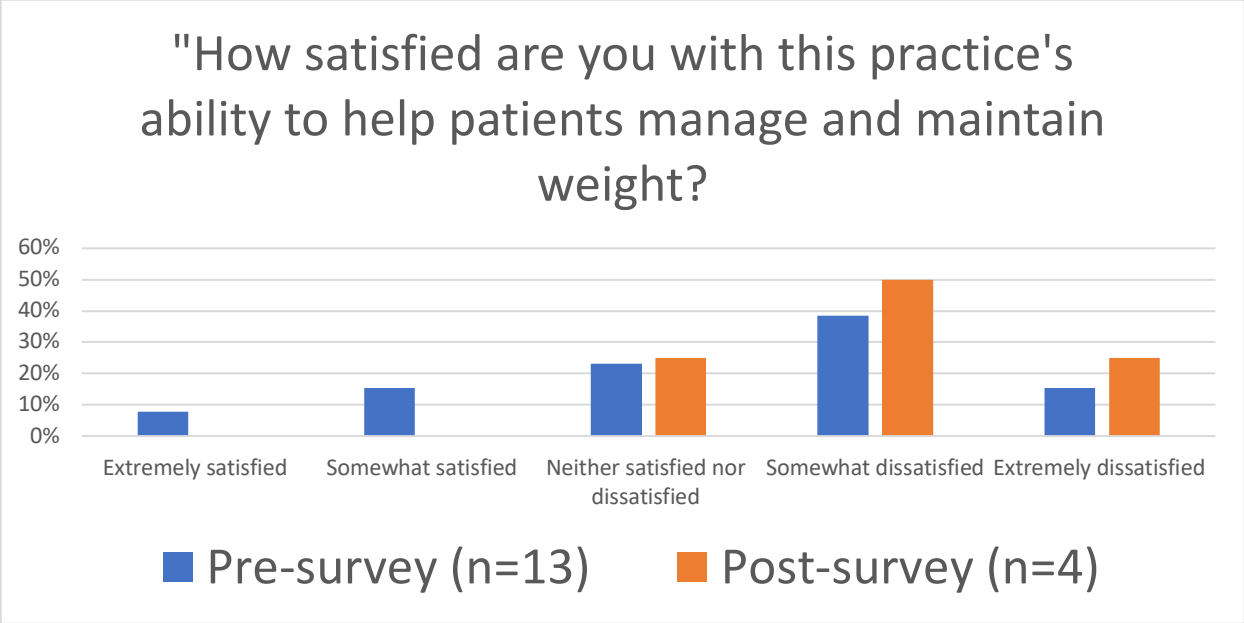
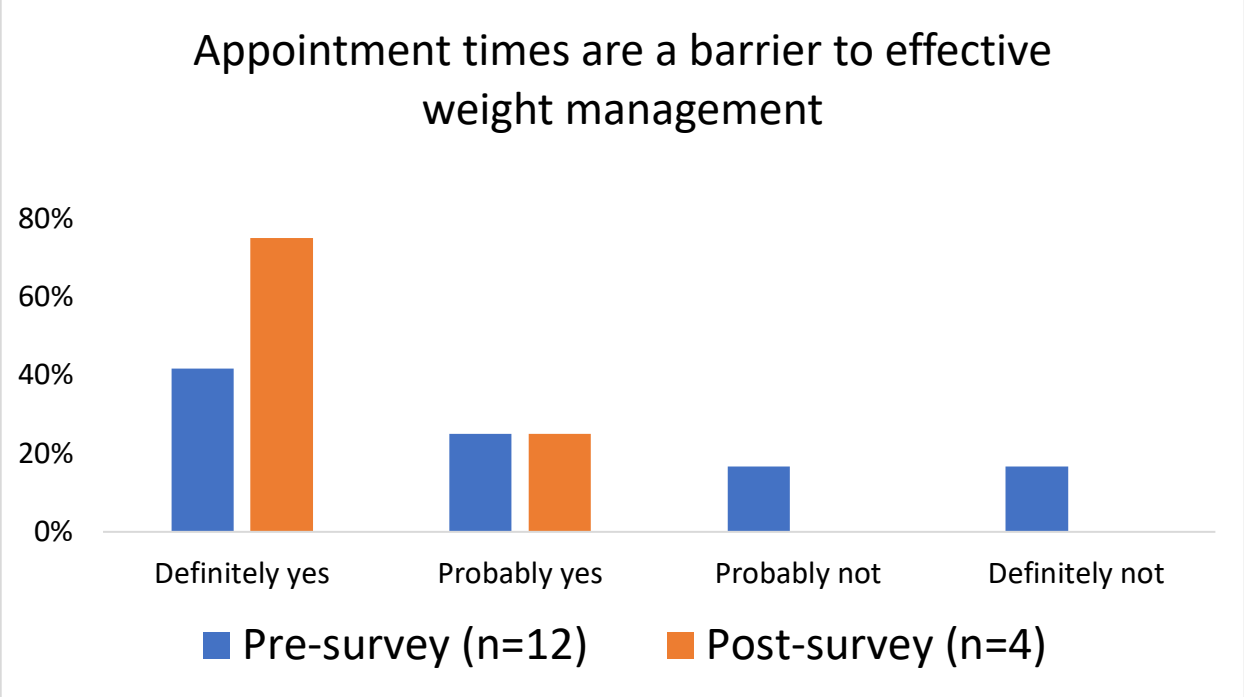


Figure 7: Beliefs pre-and post-education data



Appendix B

Figure 1. Descriptive characteristics of pre-survey participants

Demographics	
Role in practice	Registered Nurse: <1% (n=1) Advance practice provider (PA, NP): 71% (n=10) Behavioral health consultant: 21% (n=3)
FTE in current practice	Full time: 28% (n=4) 0.8FTE: 0 0.6FTE: 64% (n=9) On – call: <1% (n=1)
Educational preparation	Graduate degree 85% (n=12) Bachelor's degree <1% (n=1) Prefer not to say <1% (n=1)
Years in healthcare	1-5 years: <1% (n=1) 1-15 years: 35% (n=5) 15- 20 years: <1% (n=1) >20 years: 21% (n=3)
Obesity training	
Obesity treatment certification	Yes = 0% No = 0%
Obesity or weight-loss CME in the last 2 years	Yes = 64% (n=9) No = 28% (n= 4) Unsure = <1% (n=1)

Figure 2. Descriptive characteristics of post-survey participants

Demographics	
Role in practice	Registered Nurse: 0% Advance practice provider (PA, NP): 100% (n=4) Behavioral health consultant: 0%
FTE in current practice	Full time: 0% 0.8FTE: 50% (n=2) 0.6FTE: 25% (n=1) On – call: 25% (n=1)
Educational preparation	Graduate degree 100% (n=4) Bachelor's degree 0% Prefer not to say 0%
Years in healthcare	1-6 years: <1% (n=1) 1-16 years: 50% (n=2) 15- 20 years: 25% (n=1) >20 years: 25% (n=1)

Obesity training	
Obesity treatment certification	Yes = 25% (n=1) No = 0% (n=4)
Obesity or weight-loss CME in the last 2 years	Yes = 64% (n=9) No = 75% (n= 3) Unsure = 25% (n=1)

Appendix C

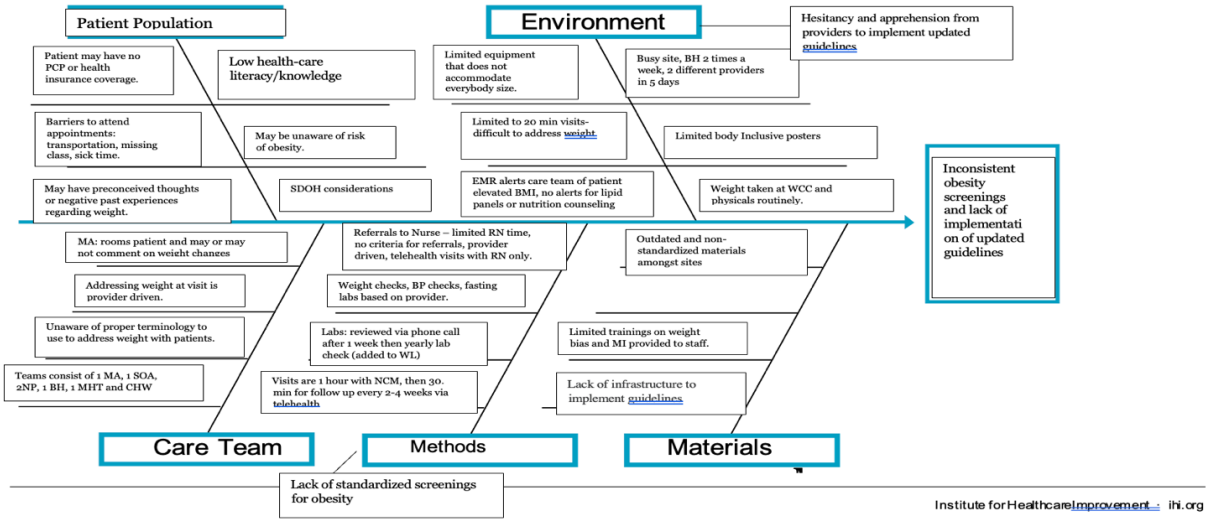
Project planning 703A	x								
Complete IRB determination		x							
PDSA cycle 1 [presentation]			x						
Data analysis				x	x	x	x	x	
Final data analysis- post intervention survey									x
Prepare for Project dissemination									x
	March-June	July	August	September	October	November	December	January 2024	February 2024
Project planning 703A	x								
Complete IRB determination		x							
PDSA cycle 1 [presentation]					x				
Data analysis						x	x	x	
Final data analysis- post intervention survey									x
Prepare for Project dissemination									x

Appendix D

Cause and Effect Diagram

Team: _____ **Project:** _____

1) Input the effect you'd like to influence.
2) Input categories of causes for the effect (or keep the classic five).
3) Input causes within each category.



Appendix E

Letter of Support from Clinical Agency

Appendix D

Date:

OREGON HEALTH & SCIENCE UNIVERSITY

IRB MEMO

Research Integrity Office
3181 SW Sam Jackson Park Road - L106RI
Portland, OR 97239-3098
(503)494-7887 irb@ohsu.edu

NOT HUMAN RESEARCH

July 19, 2023

Dear Investigator:

On 7/19/2023, the IRB reviewed the following submission:

Title of Study:	Pediatric obesity screening and treatment guidelines: A quality improvement project
Investigator:	Sharon Norman
IRB ID:	STUDY00026020
Funding:	None

The IRB determined that the proposed activity is not research involving human subjects. IRB review and approval is not required.

Certain changes to the research plan may affect this determination. Contact the IRB Office if your project changes and you have questions regarding the need for IRB oversight.

If this project involves the collection, use, or disclosure of Protected Health Information (PHI), you must comply with all applicable requirements under HIPAA. See the HIPAA and Research website and the Information Privacy and Security website for more information.

Sincerely,

The OHSU IRB Office

Appendix F

MULTNOMAH COUNTY HEALTH DEPARTMENT
PROJECT REVIEW TEAM (PRT)
Project Review Request Form

The purpose of having a project evaluated by the Project Review Team (PRT) is to 1) determine whether the project meets the federal definition of 'research' [45 CFR 46.102(d)] or public health practice; and 2) for those projects deemed public health practice, provide guidance on the specific areas related to human subject protection, including risks and informed consent; and confidentiality of personally identifiable health data. The PRT evaluates only obvious potential violations of protocol and human subject protections; it does not mitigate the project leader and his/her manager's responsibility to protect confidentiality of the data and to fully advise participants of potential risks. Additionally, the PRT does not make approval on behalf of the program or division with regard to allocation of resources or support for the project. If the PRT determines the project is research, the project leader must submit the project for IRB review. For projects deemed public health practice, the PRT may recommend changes to procedures related to risks and informed consent. The suggested changes must be made for the PRT to sign-off on the project.

PART I: PROJECT OVERVIEW

Date of Request: 6/30/23

Project Title: Pediatric Obesity screening and treatment guidelines: A quality improvement project

Is this work funded by a grant? If yes,	Yes	No
Grant Number: N/A		
Grant Funder: N/A		

MCHD Project Lead (name, title): Kristi Castillo, RN – Pediatric DNP student

Project Lead Signature: _____

Program Manager (name, title): Katie Strawn, CPNP-PC, FNP-C – SHC site medical director
(If different from Project Lead)

Program Manager Signature: _____

Partner Organizations/Agencies: OHSU

Primary Contact (name, title): Kristi Castillo, RN – Pediatric DNP student

Division	
Integrated Clinical Services	Nursing Practice
Tri-County Health Officer	Mental Health and Addiction
Public Health	

1. Has this project been considered by an IRB? If yes,	Yes	No
a. IRB name: OHSU Institutional Review Board (IRB)		
b. What was the result of IRB review? Pending		

FOR COMPLETION AFTER PRT REVIEW **PRT Review Date 7/24/23**
PRT Case Number 2023-03

PART V: Project Review Team Findings

The Project Review Team (PRT) has found the above project to be:

Research: IRB review is required. Project notified on _____(date).

Public Health Practice

If public health practice:

No concerns, PRT signs off on the project.

Signed form sent on _____(date).

PRT has suggested the following changes that are not required:

Suggested changes have been communicated to project lead and the signed form sent on (date).

PRT has identified the following concerns that **require changes** to the protocol and PRT form:

Thanks for the submission. The main question I have regarding the project is the primary intent. Would you say that the primary purpose of your project is to generalize the findings beyond the providers in the education session? Or, is the primary intent to examine the state of knowledge of current providers and influence their understanding for future quality improvement?

Also, please provide in greater detail where you will recruit providers, who exactly will be recruited, how many you anticipate participating, and where/how (location/videoconference) the session will take place. Please also provide a consent script for the participants that includes the elements listed in the attached checklist. Once the revisions are complete for the PRT Form and the consent script is written, please re-submit and I will turn it around ASAP.

Required changes have been communicated to the project on **7/5/23** (date).

Response from the project team is requested by **7/20/23** (date).

Project team response received on **7/20/23** (date).

Project team has made the required changes, PRT's concerns addressed, and case is closed. Form signed and sent on **7/24/23** (date).

Project team has declined to make the required changes, Division Director Notified, and case is closed as of _____(date).

SIGNATURES:

MCHD Project Leader: _____Kristi Castillo _____ _____

Suggested changes have been communicated to project lead and the signed form sent on (date).

PRT has identified the following concerns that **require changes** to the protocol and PRT form:

Thanks for the submission. The main question I have regarding the project is the primary intent. Would you say that the primary purpose of your project is to generalize the findings beyond the providers in the education session? Or, is the primary intent to examine the state of knowledge of current providers and influence their understanding for future quality improvement?

Also, please provide in greater detail where you will recruit providers, who exactly will be recruited, how many you anticipate participating, and where/how (location/videoconference) the session will take place. Please also provide a consent script for the participants that includes the elements listed in the attached checklist. Once the revisions are complete for the PRT Form and the consent script is written, please re-submit and I will turn it around ASAP.

Required changes have been communicated to the project on **7/5/23** (date).

Response from the project team is requested by **7/20/23** (date).

Project team response received on **7/20/23** (date).

Project team has made the required changes, PRT's concerns addressed, and case is closed. Form signed and sent on **7/24/23** (date).

Project team has declined to make the required changes, Division Director Notified, and case is closed as of _____(date).

SIGNATURES:

MCHD Project Leader: _____Kristi Castillo _____ _____
7/20/23
Title: BSN RN - Pediatric DNP student

Program Manager: katie Strawn Date___
7/20/23
Title: SHC Medical site director

Chair of PRT: _____ **Date:**
7/24/23 Printed Name: Jason
Thompson Date
Title: Research Scientist

cc: MCHD Project Leader
Program Manager
Partner Organization Leads

PART III: CONFIDENTIALITY OF DATA

8. Will data containing personal identifiers (e.g. name, address, SS#, etc) be used? If no, skip to Q.9.	Yes	No
a. Will records containing identifiable data be transmitted outside of the Multnomah County Health Department?	Yes	No
b. If yes, to whom and how is the data transmitted?		
c. Explain how the data recorded about the individual could potentially place him or her at risk of criminal or civil liability, or be damaging to his or her financial standing or employability if it were to become known outside the study:		
n/a		
d. Describe measures for maintaining confidentiality and security of the data at each place where identifying data will reside (even if only temporarily). Include measures for both hard copy and electronic security, as well as any other media type (e.g. audio tapes).		
Identifiable data will not be utilized for this project.		

9. Will identifiable data be destroyed after the project is completed?	Yes	No	N/A
a. If no, describe measures taken to keep data secure for duration of storage:			

PART IV: OTHER CONCERNS

10. Are there any other concerns that are relevant to the Project Review Team's review that should be considered?	Yes	No
a. If yes, explain:		

2. Has this project previously been considered by the Project Review Team? If yes,	Yes	No	Unknown
a. Date reviewed: n/a			
b. Purpose of reconsideration: n/a			

3. Please provide a brief overview of project, purpose, methods, objectives, sample size, recruitment process and subjects (1/2 page).

The goal of this QI project is for the SHC to implement a standardized evidenced-based approach to identify and treat school aged children who are overweight or obese.

1. This QI will include a face-to-face 1-hour education session that will address appropriate weight terminology, the importance to address weight, screening for comorbidities, and up to date evidence-based guidelines and treatment when caring for children with obesity. Katie Strawn, medical Director has agreed to include my educational segment at the fall return staff meeting in August. The location will be held at one of the Multnomah County buildings, which is to be determined. Providers, BHCs, and RNs will receive this training during paid protected time to prioritize participation in the curriculum and recognize the importance of the training, roughly 12-16 attendees. Printed and digital material will be provided including the power point presentation presented at the education segment and a standardized evidenced-based flow chart that includes the practice guidelines that will be reviewed during this session. A de-identified confidence survey will be distributed using Qualtrics prior to the educational segment to providers, BHCs, and RNs to acquire data on current practices, available resources, and comfort level treating children with obesity. Additionally, a de-identified three-month follow-up Qualtrics survey will be distributed for evaluation of education session, usefulness of the flow chart, and application of these guidelines to practice. The primary purpose of this QI project is not to generalize the findings beyond the providers in the education session.

4. Please describe how the findings of this project will be used.

The results will be utilized in my Doctor of Nursing practice presentation shared with students and faculty at OHSU. I may submit an abstract for presentation at a nursing conference. Publication of this project may be considered.

5. The primary intent of this project is to:
Develop generalizable knowledge (primary goal is to learn something for the purpose of benefiting the broader population not just the subject or specific community)
The primary intent is to examine the state of knowledge of current providers and influence their understanding for future quality improvement.
Identify or control a public health problem (intended benefits are primarily for the subject or the subject's community)
Program evaluation (assess the outcomes of a program with the intent of further development and improvement)
Formative evaluation (assessment taking place before or during a project's implementation with the aim of improving the project's design and performance)
Public Health Surveillance (collection, analysis, and interpretation of health-related data to protect and promote population health)
Other Explain:
Additional information:

PART II: RISKS AND INFORMED CONSENT

6. Describe risks to subjects including potential risks if there were a confidentiality breach:

This project collects health information [# of referrals to RN for healthy lifestyle intervention] but does not involve access to or recording of any of the 18 individual identifiers, and therefore does not involve PHI. This project is not intended to involve human research. All surveys collected are de-identified and will be collected electronically with no PHI involved. Potential risks of confidentiality breach is minimal.

7. Will you obtain informed consent?	Yes-Oral	Yes-Written	No
	Implicit by responding to survey		
a. If yes, identify when and how consent is obtained [attach copy of consent script(s) or form(s)]: Consent will be implied with completion of the survey and the following statement will be included in the survey, "The purpose of this survey is to learn about you, the practice, and what is provided in relation to patients with overweight and obesity. This survey is coded for confidentiality and will remain anonymous. This survey will take approximately about 10-15 minutes to complete". Completion of this survey is voluntary and consent to participation on my doctoral of nursing practice project. If there are any questions regarding the project or your involvement, please contact castillk@ohsu.edu".			
b. If no, clarify why consent is not obtained:			
Additional information:			

PART III: CONFIDENTIALITY OF DATA

8. Will data containing personal identifiers (e.g. name, address, SS#, etc) be used? If no, skip to Q.9.	Yes	No
a. Will records containing identifiable data be transmitted outside of the Multnomah County Health Department?	Yes	No
b. If yes, to whom and how is the data transmitted?		

Appendix G

The purpose of this survey is to learn about you, the practice, and what is provided in relation to patients with overweight and obesity. This survey is coded for confidentiality and will remain anonymous. This survey will take approximately about 10-15 minutes to complete. Completion of this survey is voluntary and consent to participation on my doctoral of nursing practice project. In order to provide you with an assurance of confidentiality, you are being asked to generate your own unique identification code. You do not need to remember your code; instructions will be provided each time you are asked to complete a survey.

If there are any questions regarding this project or your involvement, please contact castillk@ohsu.edu.

Please use the steps below to create your code.

1. In space #1 below, write the **FIRST letter** of your **FAVORITE COLOR**.
2. In space #2 below, write the **FIRST letter** of your **CAR MAKE.**
3. In space #3 below, write the **NUMBER** that represents how many **BROTHERS** you have.
4. In space 4 below, write the **NUMBER** that represents how many **SISTERS** you have.
5. In space 5 below, write either:
    - the number 1 if the **FIRST LETTER** of your **FIRST NAME** is in the first half of the alphabet (A-M); OR
    - the number 2 if the **FIRST LETTER** of your **FIRST NAME** is in the last half of the alphabet (N-Z).
6. In space #6 below, find the month that you were born and **write the designated number**:
    - January, April, July, or October, write the number 3
    - February, May, August, or November, write the number 4
    - March, June, September, December, write the number 5

Your Unique ID is: 1. _____ 2. _____ 3._____4. _____ 5. _____ 6. _____

For the purpose of this survey **overweight is referred as a BMI >85th percentile**- < **95th percentile** for weight and age and **obesity is referred to as a BMI >95th percentile** for weight and age.

Your Unique ID: __ __ __ __ __ __

A. Background & Demographics

1. Please check the appropriate box to describe your role in the practice.

□ Behavioral Health Consultant □Advanced practice provider (NP, PA) □ Registered Nurse □ Other_____

Gender: □ Male □ Female □ Nonbinary □ Prefer to not answer

Age: □ Under 30 □ 30-45 □ 46-60 □ Over 60 □ Prefer to not answer.

1) What is your highest level of education:
    a. Associate degree
    b. Bachelor's degree
    c. Master's degrees
    d. Doctoral
    e. Ph. D
    f. Other _____

2. How many years have you been working in health care? _____ years
3. What is your FTE in the clinic? _____

To what extent do you agree with the following statements:

1) "Weight loss for patients with overweight or obesity is something that a primary care practice should provide to their patients as part of comprehensive primary care."

□ Strongly disagree □ Do not agree □ Somewhat agree □ Agree □ Strongly agree

2) How satisfied are you with this practice ability to help patients manage their weight/address weight loss and maintenance? Select the one best answer.

□ Not satisfied □ Somewhat satisfied □ Very satisfied □ Depends on the patient.
□ I'm not sure/ don't know

3) Primary care providers have an essential role in identifying and treating overweight and obese patient.

□ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

4) I feel well prepared to manage overweight and obese patients.

□ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

5) I only offer advice regarding weight control when a patient request it

□ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

6) For overweight and obese patients, even small weight loss can produce health benefits.

□ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

Your Unique ID: __ __ __ __ __ __ __

7) Discussing weight is uncomfortable for the patients.
□ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree

8) Most overweight and obese patient are well aware of the health risk of obesity.
□ Strongly disagree □ Disagree □ Neither agree nor disagree □ Agree □ Strongly agree agree

Weight management provided to patients in this practice.

1) Overall, how confident are you with your ability to provide high-quality weight management assistance to your patients?
□ Not confident □ Somewhat confident □ Very confident □ Depends on the patient.
□ I'm not sure

2) Overall, how effective do you believe you are with helping your overweight and obese patients to lose weight and keep it off?
□ Not effective □ Somewhat effective □ Very effective □ Depends on the patient.
□ I'm not sure

3) Do you feel like you are unable to address weight with patients that are overweight or obese due to lack of time in appointments?
□ No, never □ Experience often □ Almost always □ Always

4) Do you feel like you are unable to provide effective treatment to all overweight or obese children due to lack of patient motivation to lose weight ?
□ No, never □ Experience often □ Almost always □ Always

5) Do you feel like you are unable to provide effective treatment to all overweight or obese children due to lack of training or knowledge in weight loss?
□ No, never □ Sometimes □ Almost always □ Always

6) Do you have obesity treatment certification?
□ No □ Yes; what certification (if known)_____

7) Have you gotten additional CME on how to provide obesity treatment or weight loss?
□ No, never □Yes, but not for a long time (>3 years) □Yes, within the past 3 years

Your Unique ID: __ __ __ __ __ __ __

To what extent do you provide these services for patients with overweight or obesity? **Please check one box for each item listed below**.

☐ I am not involved in any of the items listed below.

	Not at all	Some times	Very often	Always
Identify patient for whom weight-loss might be recommended				
Address weight with patients				
Educated patient about the effects of excess weight on health				
Offer weight loss strategies to patients				
Provide ongoing visits (at least monthly) to assist patients with weight loss				
Show a patient their weight loss improvement over time				
Set and track patient-specific weight loss goals				
Discuss motivational/change strategies for weight loss with patients				
Involve caregivers in discussion of health promoting behaviors				
Refer to counseling/therapy for weight				
Refer patient to nutrition counseling with nurse				
Refer to dietician				
Refer patient to bariatric surgery				
Refer patient to weight loss programs				
Provide medication for weight loss				
Complete coding and/or billing to get paid for weight prioritized visits				

Thank you for taking the time to complete this confidential survey. Your input is very much appreciated!