

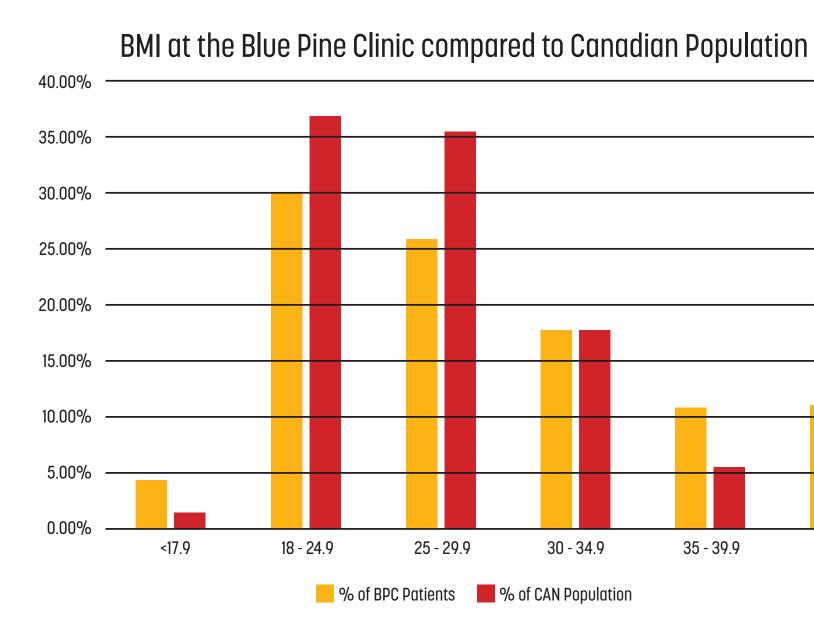
Location: Blue Pine Clinic, Prince George **Contact:** Dr. Omowumi Iyaoromi Date: June 7, 2021

AIM STATEMENTS

Decrease weight bias as measured by the BAOP (Beliefs about Obese Persons Scale) amongst staff and providers at the Blue Pine Clinic by 20% from a baseline of 26.59/48 (measured Feb 2021) by April 30, 2021 by providing education on weight bias in healthcare, adding posters to the clinic, and using the Edmonton Obesity Staging tool to measure health.

BACKGROUND

The Blue Pine Clinic (BPC) supports a marginalized and vulnerable population of patients who have barriers to accessing fee for service primary care in downtown Prince George, British Columbia. BPC patients are overrepresented in the lowest and highest BMI categories as compared to the Canadian average (Stats Canada Census 2016).



Staff and providers at the BPC recognize the importance of reducing bias and stigma in all aspects of their practice and identified weight bias as an opportunity for improvement.

PROBLEM STATEMENT

- Both self-report and experimental research demonstrate negative stereotypes and attitudes toward obese patients by a range of health care providers and fitness professionals, including views that obese patients are lazy, lacking in self-discipline, dishonest, unintelligent, annoying, and noncompliant with treatment. (Puhl & Brownel, 2001; Puhl & Heuer, 2009)
- Research by Hebl and Xu (2001) found that providers spend less time in appointments and provide less health education with

obese patients compared with thinner patients.

- Studies show that obese patients are less likely to receive age and gender appropriate cancer screenings and other preventative medicine even after adjustment for lower education, income, and higher burden of illness (Wee et al, 2000; Mitchell et al, 2008)
- Weight stigmatization has been documented as a significant risk factor for depression, low self-esteem, and body dissatisfaction. (Carr et al, 2005)

TEAM MEMBERS:

Dr. Omowumi Iyaoromi, Dr. Nicole Touhey, Tracie Janzen, Laurie Zoppi, Lindsay Kraitberg, Bonnie Mercedes, Laura Parmar

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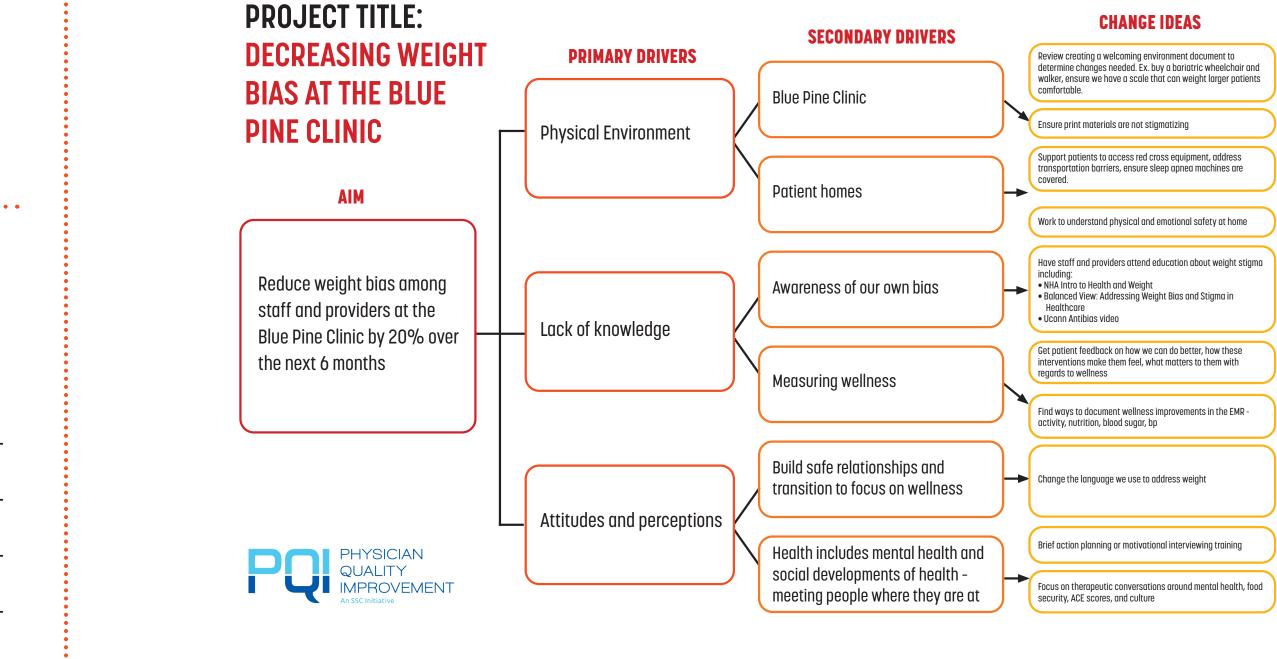
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REFERENCES

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CHANGE IDEAS

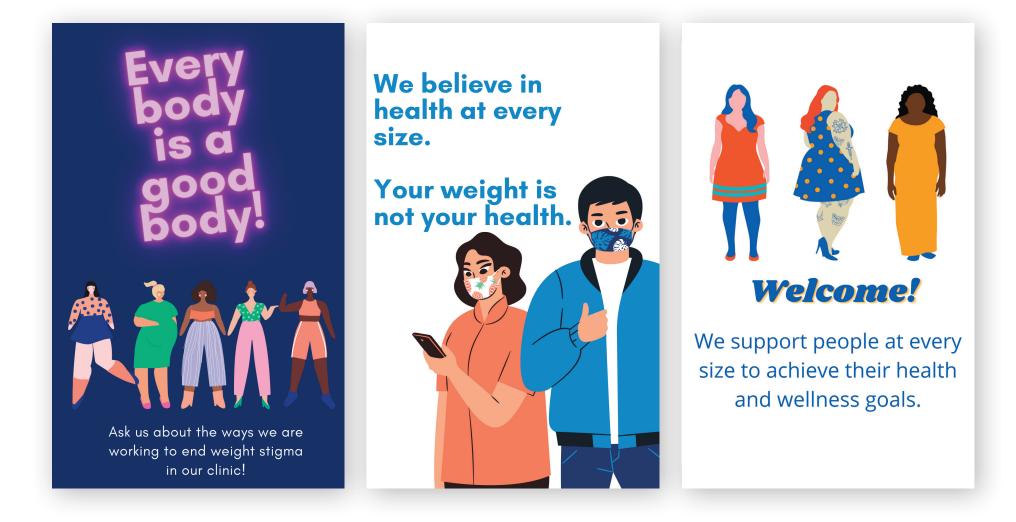


The changes implemented in this quality improvement project included: Education for staff

This education included information on weight bias, enhancing understanding of new research around best practices for supporting health at every size, the Obesity Canada 2020 guidelines, and use of the Edmonton Obesity Staging System to assess health. The training was presented by members of their team engaged in this project as well as dietitian guest speakers.

Edmonton Obesity Staging System (EOSS) The Edmonton Obesity Staging System was implemented as a way for providers to engage in conversations about health at every size and document patient health in the EMR Survey The Beliefs About Obese Persons (BAOP) scale was used as a pre and post assessment to determine the impact of the change ideas.

Created posters for the clinic To remind staff and patients of their commitment to the project



Application for funding for weight inclusive equipment – in progress

• Allison, D.B., Basile, V.C., & Yuker, H. E. (1991). The measurement of attitudes toward and beliefs about obese persons. International Journal of Eating Disorders, 10, 599-

>40

• Carr D, Friedman MA. Is obesity stigmatizing? Body weight, perceived discrimination, and psychological well-being in the United States. J Health Soc Behav 2005;46(3):244-259 [PubMed] [Google Scholar]

- to the size of a patient. Int J Obes *Relat Metab Disord* 2001;25(8):1246-1252 [PubMed] [Google Scholar] Mitchell RS, Padwal RS, Chuck AW, Klarenbach SW. Cancer
- screening among the overweight and obese in Canada. Am J Prev Med 2008;35(2):127-132 [PubMed] [Google Scholar]
- Puhl R, Brownell KD. Bias, discrimination, and obesity. Obes Res 2001;9(12):788-805 [PubMed] [Google Scholar]
- Puhl RM, Heuer CA. Weight bias: a review and update. *Obesity (Silver Spring)* 2009;17(5):941–964 [PubMed]

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• Hebl MR, Xu J. Weighing the care: physicians' reactions

REDUCING WEIGHT BIAS IN A TEAM-BASED DRIMARY CARE CLINIC

RESULTS

- 12 staff and providers at the BPC completed the **Beliefs About** Obese Persons (BAOP) survey.
- Pre-survey result in January 2021 was a score of 26.59, where the least biased score is 48 and the most is 0. • The goal was to decrease our average bias by 20%, which
- would be represented by a score of 31.9 • The final score following the interventions was 33.1 which is
- an improvement of 24.5%!
- This decrease in biased beliefs about obese persons represents a meaningful change in the attitudes and opinions held by the staff and providers at the Blue Pine Clinic as a result of this project. Research indicates that decreased biases lead to more appropriate and psychologically safe care for patients and better health outcomes. While, assessing these outcomes is out of the scope of this project, staff and providers have expressed that:
 - 1. There will be biannual continuing medical education on Obesity bias
 - 2. The use of the Edmonton Obesity Scoring Scale to measure health in place of the BMI
 - 3. Patient Survey on Obesity Bias among Staff and

EOSS: EDMONTON OBESITY STAGING SYSTEM - Staging tool

STAGE 0	STAGE 1	WHO CLASSIFICATION OF V
 NO sign of obesity-related risk factors NO physical symptoms NO psychological symptoms NO functional limitations 	 Patient has obesity-related SUBCLINICAL risk factors (borderline hypertension, impaired fasting glucose, elevated liver enzymes, etc) -OR- MILD physical symptoms - patient currently not requiring medical treatment comorbities (dyspnea on moderate exertion, occasional aches/pains, fatigue, etc.) -OR- MILD obesity-related psychological symptoms and/ or mild impairment of well-being (quality of life not impaired) Case Example: 38 year old female with a BMI of 59.2 kg/m², borderline hypertension, mild lower back pain, and knee pain. Patient does not require any medical intervention. Class III, Stage 1 Obesity 	Obese Class I Obese Class II Obese Class III
Case Example: Physically active female with a BMI of 32/kg/m ² , no risk factors, no physical symptoms, no self-esteem issues, and no functional limitations		Stage 0 / Stag
Class 1, Stage 0 Obesity EDSS Score		Patient <i>does n</i> admission at t Please refer to preventative tr
WHO Obesity Classification		
STAGE 2	STAGE 3	STAGE 4
 Patient has an ESTABLISHED obesity-related comorbidities requiring medical intervention (HTN, Type II Diabetes, sleep anea, PCOS, osteoarthritis, reflux disease) -OR- MODERATE obesity-related psychological symptoms (depression, eating disorders, anxiety disorders.) -OR- MODERATE functional limitations in daily activities (quality of life is beginning to be impacted) 	 Patient has SIGNIFICANT obesity-related end-organ damage (mycardial infection, heart failure, diabetic complications, incapocitating osteoarthritis) -OR- SIGNIFICANT obesity-related psychological symptoms (major depression, suicide ideation) -OR- SIGNIFICANT functional limitations (eg. unable to work or complete routine activities, reduced mobility) SIGNIFICANT impairment of well-being (quality of life significantly impacted) 	 SEVERE (potential end sta comorbidities -OR- SEVERELY disabling psyc SEVERE functional limitat
Case Example: 32 year old male with a BMI of 36 kg/m² who has primary hypertension and obstructive sleep apnea.	Case Example: 49 year old female with a BMI of 67 kg/m ² diagnosed with sleep apnea, CV disease, GERD, and suffered from stroke. Patients mobility is significantly limited due to osteoarthritis and gout.	Case Example: 45 year old female with a BM chair becuase of disabling an and anxiety disorder.

► NEXT STEPS

- Create a pamphlet to educate patients on obesity bias and inform them that the BPC is a safe space where providers have been trained in obesity bias and are working to provide better care for patients.
- Create EOSS reminders for patients with BMI greater than 30 in the EMR.
- Continue to pursue funding for inclusive equipment for the clinic including a safe scale, large examination gowns, and size inclusive blood pressure cuffs.

• Puhl, Rebecca M, and Chelsea A Heuer. "Obesity stigma: important considerations for public health." American *journal of public health* vol. 100,6 (2010): 1019-28. doi:10.2105/

• Wee CC, McCarthy EP, Davis RB, Phillips RS. Screening for cervical and breast cancer: is obesity an unrecognized barrier to preventive care? Ann Intern Med 2000;132(9):697-

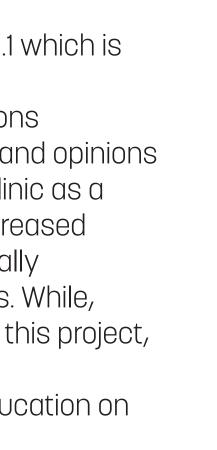
Scan for a podcast episode about this project or visit www.nhpqi.ca

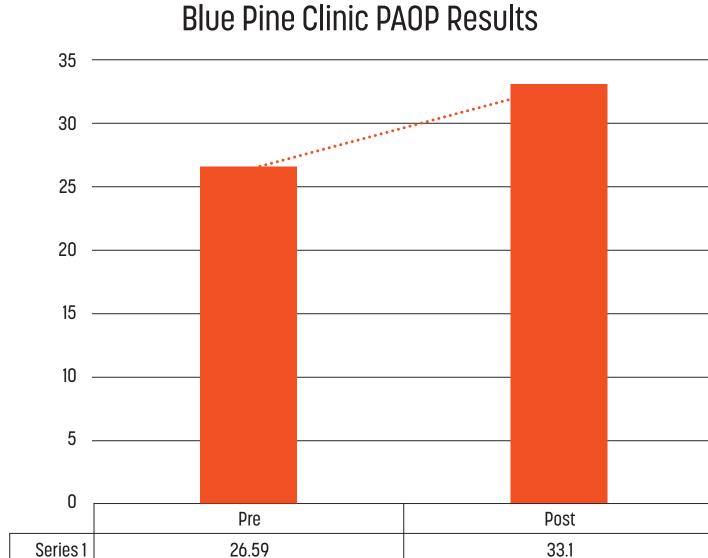


Quarterly

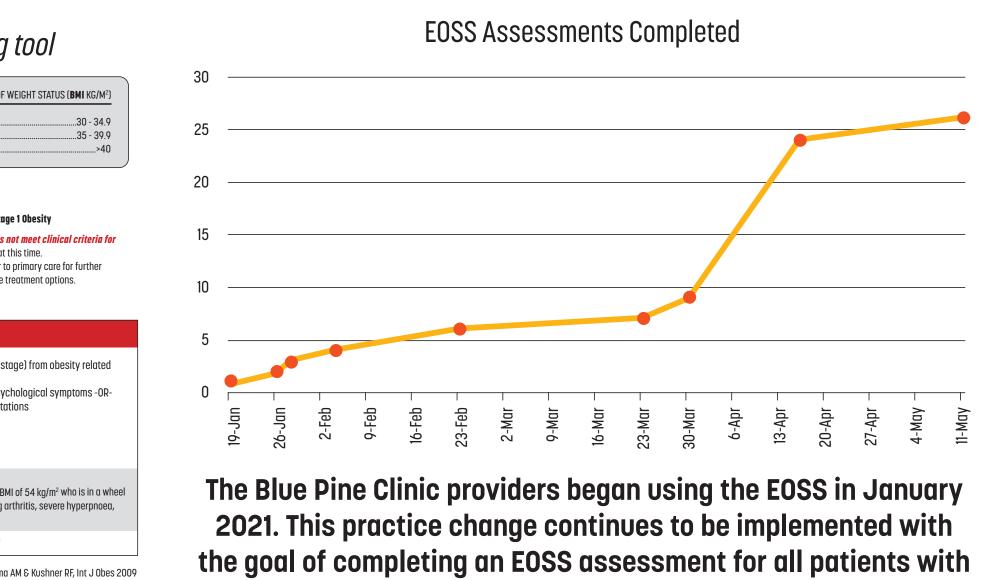
providers

4. Advocate for weight inclusive equipment such as weighing scale, examination tables, wheel chair, blood pressure cuffs and examination gowns.





The team also implemented the 2020 Obesity Canada recommendation of supplementing BMI with the Edmonton Obesity Staging Scale (EOSS). The EOSS is designed to support Health at Every Size (HAES) medical practice by using a classification system based on health indicators such as physical and psychological symptoms and functional limitations instead of focusing only on weight and height.



a BMI over 30 (39.6% of BPC pts.)

SUSTAINING THE GAINS

- Annual ongoing training lead by our team members on obesity bias to continue to improve awareness on the team.
- Updates on latest information, tools, and guidelines. • Use the survey again to determine if changes are sustained or improved over time.