



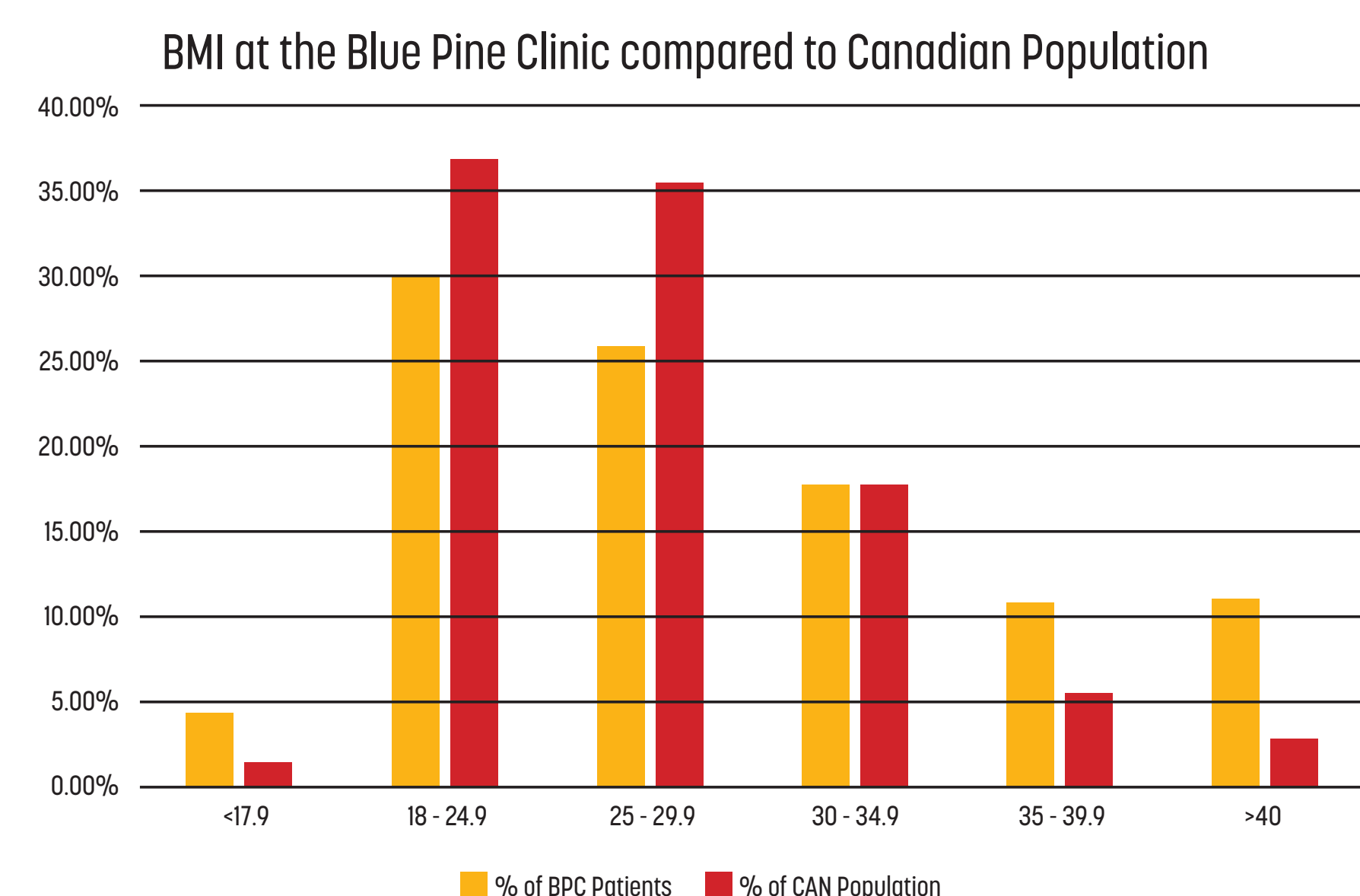
# REDUCING WEIGHT BIAS IN A TEAM-BASED PRIMARY CARE CLINIC

## 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.

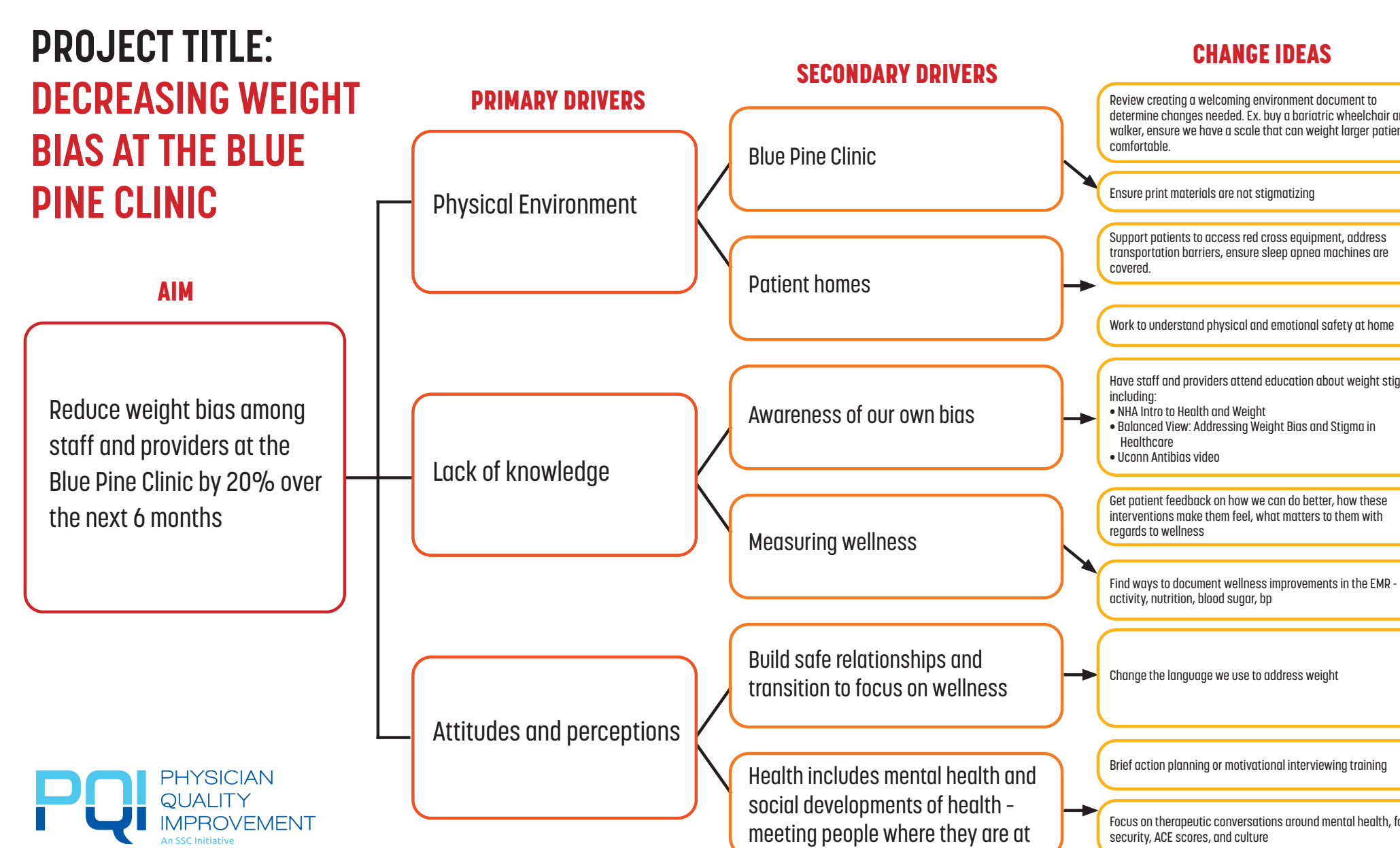
## PROBLEM STATEMENT

- 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 & Brownell, 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)

## CHANGE IDEAS



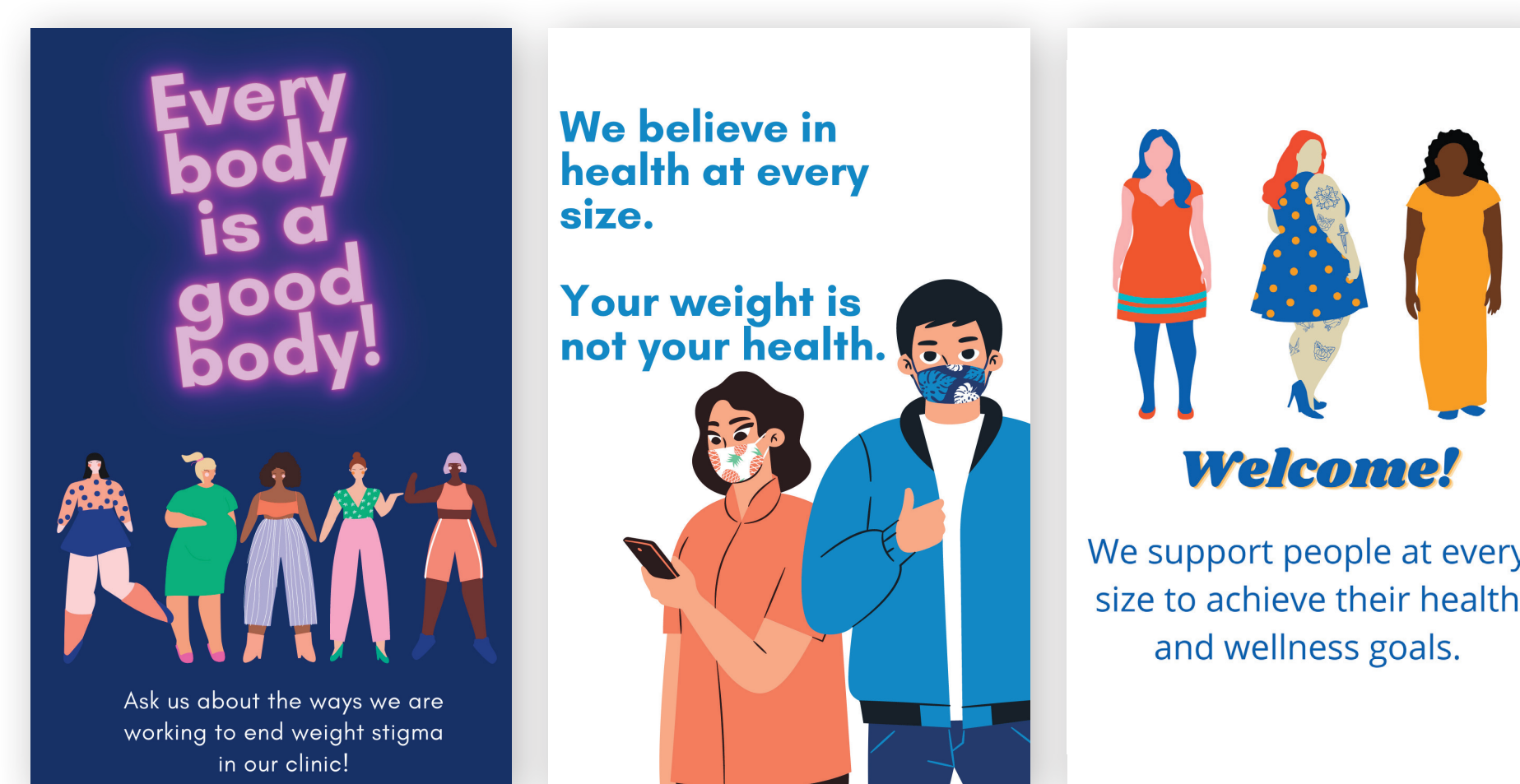
The changes implemented in this quality improvement project included:

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.

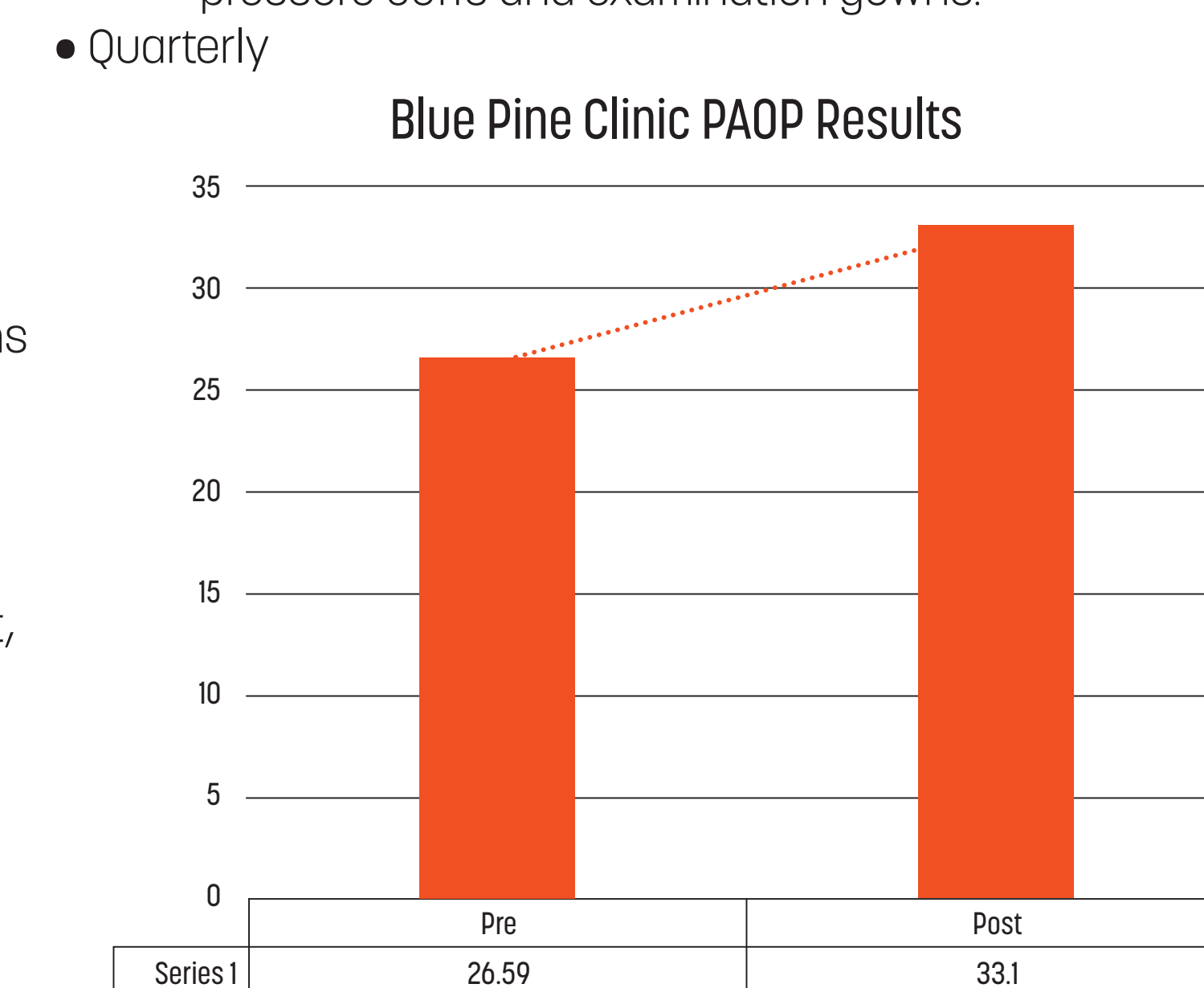


Application for funding for weight inclusive equipment - in progress

## 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:
  - There will be biannual continuing medical education on Obesity bias
  - The use of the Edmonton Obesity Scoring Scale to measure health in place of the BMI
  - Patient Survey on Obesity Bias among Staff and

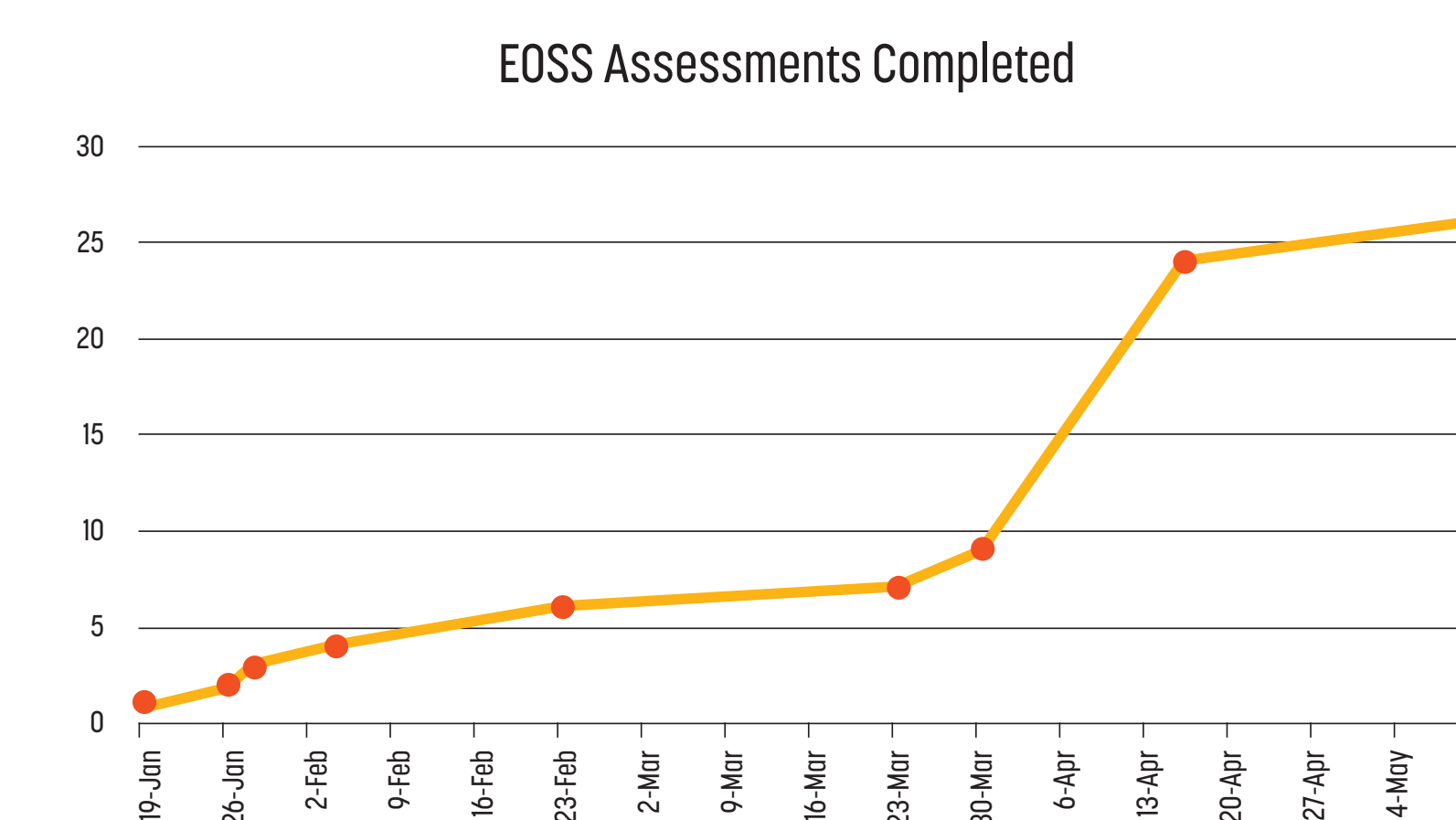
- providers
- 4. Advocate for weight inclusive equipment such as weighing scale, examination tables, wheel chair, blood pressure cuffs and examination gowns.



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.

### EOSS: EDMONTON OBESITY STAGING SYSTEM - Staging tool

STAGE 0	STAGE 1	WHO CLASSIFICATION OF WEIGHT STATUS (BMI SCALE)						
<ul style="list-style-type: none"> <li>NO sign of obesity-related risk factors</li> <li>NO physical symptoms</li> <li>NO psychological symptoms</li> <li>NO functional limitations</li> </ul> <p>Case Example: 30-year-old female with a BMI of 23.9 kg/m<sup>2</sup>, no risk factors, no physical symptoms, no self-esteem issues, and no functional limitations.</p> <p>Class 0: Stage 0 Obesity</p>	<ul style="list-style-type: none"> <li>Patient has obesity-related SUBCLINICAL risk factors</li> <li>Significant symptoms related to physical, psychological, and/or clinical</li> <li>MILD physical symptoms: patient currently not requiring medical treatment</li> <li>MILD psychological symptoms: patient currently not requiring medical treatment</li> <li>MILD obesity-related psychological symptoms and/or functional limitations</li> </ul> <p>Case Example: 38-year-old female with a BMI of 32.2 kg/m<sup>2</sup>, borderline hypertension, mild knee back pain, and some pain. Patient does not require any medical intervention.</p> <p>Class 1: Stage 1 Obesity</p>	<table border="1"> <tr> <td>Obese Class 1</td> <td>30 - 34.9</td> </tr> <tr> <td>Obese Class 2</td> <td>35 - 39.9</td> </tr> <tr> <td>Obese Class 3</td> <td>40 - 49.9</td> </tr> </table>	Obese Class 1	30 - 34.9	Obese Class 2	35 - 39.9	Obese Class 3	40 - 49.9
Obese Class 1	30 - 34.9							
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<ul style="list-style-type: none"> <li>Patient has an ESTABLISHED obesity-related comorbidity requiring medical intervention</li> <li>SEVERE obesity-related psychological symptoms</li> <li>SEVERE functional limitations</li> </ul> <p>Case Example: 32-year-old male with a BMI of 36 kg/m<sup>2</sup> who has primary hypertension and obstructive sleep apnea.</p> <p>Class 2: Stage 2 Obesity</p>	<ul style="list-style-type: none"> <li>Patient has SIGNIFICANT obesity-related organ damage</li> <li>SEVERE obesity-related psychological symptoms</li> <li>SEVERE functional limitations</li> </ul> <p>Case Example: 48-year-old female with a BMI of 41 kg/m<sup>2</sup> diagnosed with sleep apnea, CVD disease, GSD, and suffered from stroke. Patient's ability to significantly limit diet to lose weight is poor.</p> <p>Class 3: Stage 3 Obesity</p>	<p>STAGE 3/4 Obesity</p> <p>Patients who are not obese criteria for admission to this line. Please refer to primary care for further preventive treatment options.</p>						
<ul style="list-style-type: none"> <li>SEVERE (general) and/or organ damage from obesity-related comorbidity</li> <li>SEVERE obesity-related psychological symptoms</li> <li>SEVERE functional limitations</li> </ul> <p>Case Example: 45-year-old female with a BMI of 54 kg/m<sup>2</sup> who is in a wheel chair because of debilitating arthritis, severe hypertension, and severe diabetes.</p> <p>Class 4: Stage 4 Obesity</p>								



The Blue Pine Clinic providers began using the EOSS in January 2021. This practice change continues to be implemented with the goal of completing an EOSS assessment for all patients with a BMI over 30 (39.6% of BPC pts.)

## 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.

## 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.

**TEAM MEMBERS:**  
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