Oliver-Pyatt Centers
A Monte Nido Affiliate

Oliver-Pyatt Centers Treatment Outcomes

January 2018 – December 2020

Overview

In 2018 Oliver-Pyatt Centers (OPC) began a comprehensive research study, approved by an Institutional Review Board, in order to assess treatment outcomes in our Residential, PHP and IOP levels of care. Specifically, patients who consent to participate in our research study complete a series of questionnaires upon admission, transfer to a new level of care (stepping up or down), as well as upon discharge from the program. Additionally, we obtain follow-up data for patients who consent at specified time-points after their discharge. The surveys administered represent the gold standard of assessments for eating disorder pathology as well as depression, anxiety and trauma.

The purpose of these questionnaires is multifaceted. Primarily, it represents our commitment to personalized treatment planning. This data provides a snapshot of each patient's distinctive symptom presentation on measures of eating disorder symptoms, depression, anxiety, functional impairment, and trauma reactivity. This information deepens our understanding of the clinical challenges specific to each patient and as a roadmap for exploration of the factors that may be maintaining the eating disorder. Data guides the clinical teams in developing a shared language for each patient's experience, to build engagement and design more effective treatment plans.

In addition to guiding treatment planning, this data allows leadership at OPC to track program effectiveness and identify areas for program development. As a company, **we are continually evaluating whether we are providing the most effective and evidence-based interventions to our patients.** Last, this data is collected with the hope and expectation of contributing to a growing body of research and helping the field of eating disorders continue to move forward.

Sample

The patient sample for January 2018-December 2020 included data for 321 residential stays, 275 PHP stays and 46 IOP stays.

The average length of stay in residential was 40.95 days, 32.6 days for PHP and 30 days for IOP.

Our Residential sample included patients with the following Eating Disorder diagnoses: 29.8% Anorexia Nervosa, Restricting Type, 25.9% Anorexia Nervosa, Binge/Purge Type, 24.9% Bulimia Nervosa, 2% ARFID, 3.3% Binge Eating Disorder and 14.1% OSFED.

Our PHP sample included patients with the following Eating Disorder diagnoses: 28.8% Anorexia Nervosa, Restricting Type, 24.4% Bulimia Nervosa, 22.9% Anorexia Nervosa, Binge/Purge Type, 14.8% OSFED, 6.3% Binge Eating Disorder and 3% ARFID.

Last, the IOP sample included patients with the following Eating Disorder diagnoses: 32.1% Anorexia Nervosa, Restricting Type, 22.2% Anorexia Nervosa, Binge/Purge Type, 17.3% Bulimia Nervosa, 16% OSFED, 9.9 % BED and 2.5% ARFID.

Importantly, this group of patients from all levels of care also presented with multiple co-morbidities. For example, across all levels of care approximately 70% were diagnosed with an anxiety disorder and over 80% were diagnosed with a mood disorder.

Weight Change Data in Patients with Anorexia Nervosa at the Residential Level of Care

Overall, results demonstrate significant weight gain in our patients with Anorexia Nervosa at the residential level of care.

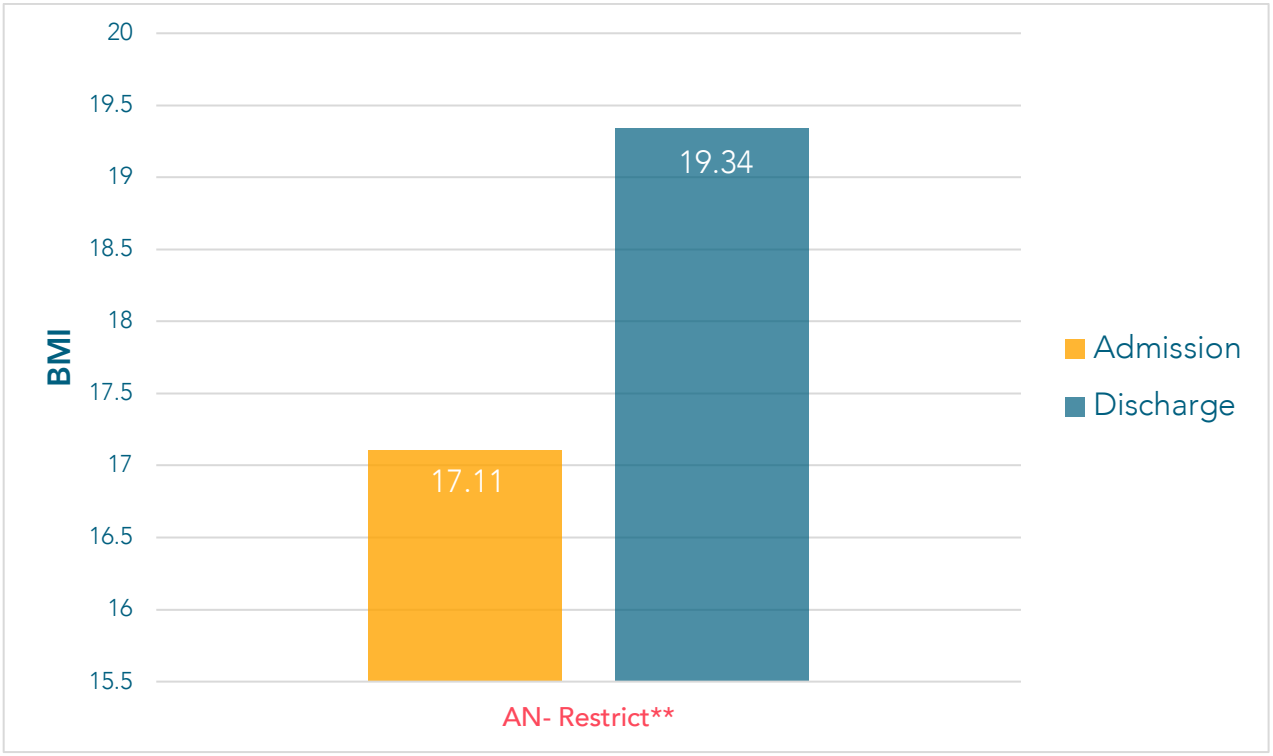
The average BMI of female adult patients with Anorexia Nervosa- Restricting Type (AN-R) admitting to residential care at Oliver-Pyatt Centers was 17.11. The average BMI at discharge was 19.34.

The average gain in weight at the Residential level of care was 13.09 pounds for clients admitting with a diagnosis of AN-R.

Eighty three percent of our adult female patients diagnosed with AN-R restored their weight to a BMI ≥ 18.5 after thirty days of treatment and 71% restored their weight to a BMI ≥ 19.

On average, all patients (regardless of diagnosis) experienced a BMI increase of 2.23 in OPC's residential program. These results demonstrate a statistically significant increase in BMI for our patients from admission to discharge.

Mean BMI at Admission and Discharge for Clients Diagnosed with AN-Restricting at OPC Residential Program from Jan 2018-Dec 2020



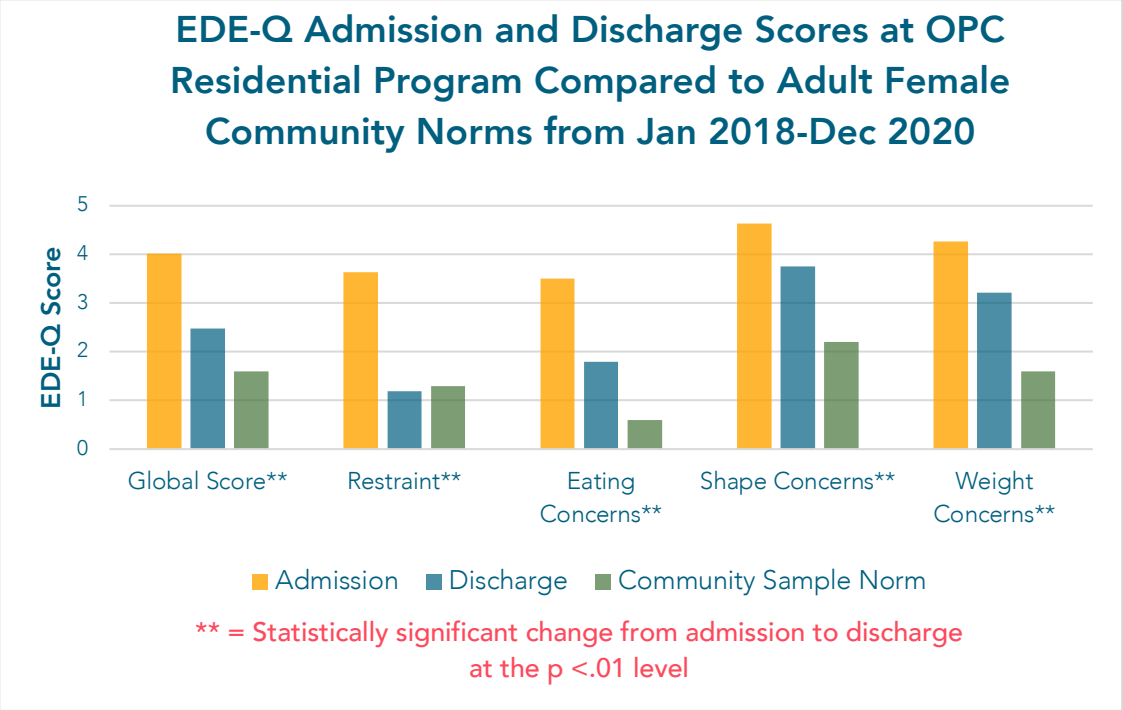
** = Statistically significant change from admission to discharge at the $p < 0.01$ level

Eating Disorder Symptoms

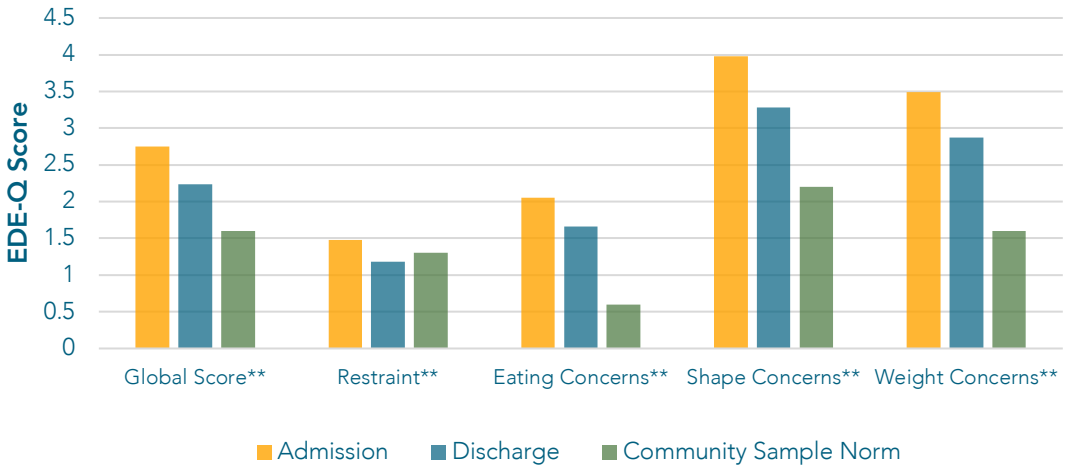
Eating Disorder Symptoms were measured using the Eating Disorder Examination Questionnaire (EDE-Q), a 28-item, self-report measure assessing the core features of eating disorder psychopathology. It is the gold-standard self-report assessment that has demonstrated reliability, validity and correlation with the lengthier assessments of eating disorder symptomology. This assessment tool measures a range of symptoms including fear of weight gain, self-induced vomiting, and loss of control with food, thus capturing the complexity and unique features of each individual's eating disorder.

Results indicate that patients experienced clinically and statistically significant reductions in eating disorder symptoms over the course of treatment in the Residential, PHP and IOP levels of care on nearly all scales.

On average, patients presented at admission with severe eating disorder symptoms relative to female community norms. Upon discharge, average patient scores on the EDE-Q were consistent with community norms, suggesting clinically significant improvements. The graphs below provides mean admission and discharge scores at OPC in comparison with community norms.

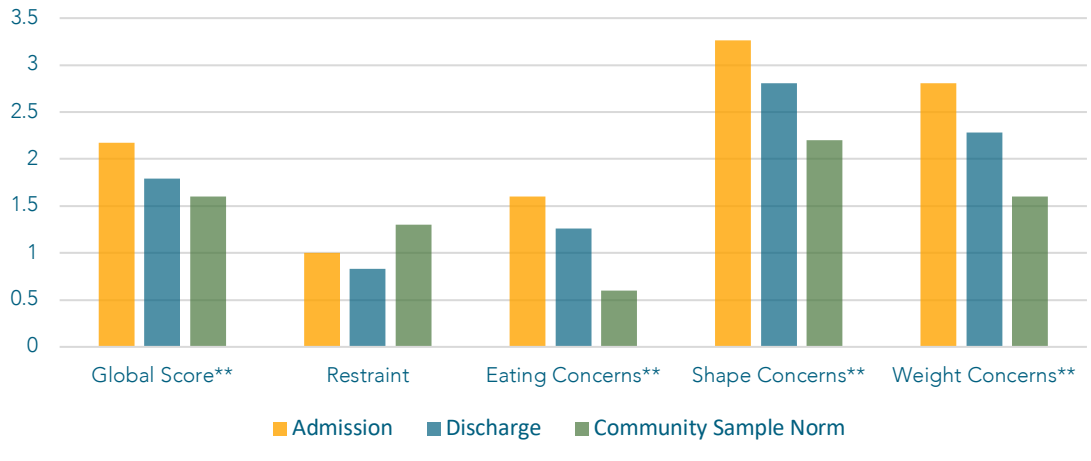


EDE-Q Admission and Discharge Scores at OPC PHP Program Compared to Adult Female Community Norms from Jan 2018-Dec 2020



** = Statistically significant change from admission to discharge at the p <.01 level

EDE-Q Admission and Discharge Scores at OPC's IOP Compared to Adult Female Community Norms from Jan 2018-Dec 2020



** = Statistically significant change from admission to discharge at the p <.01 level

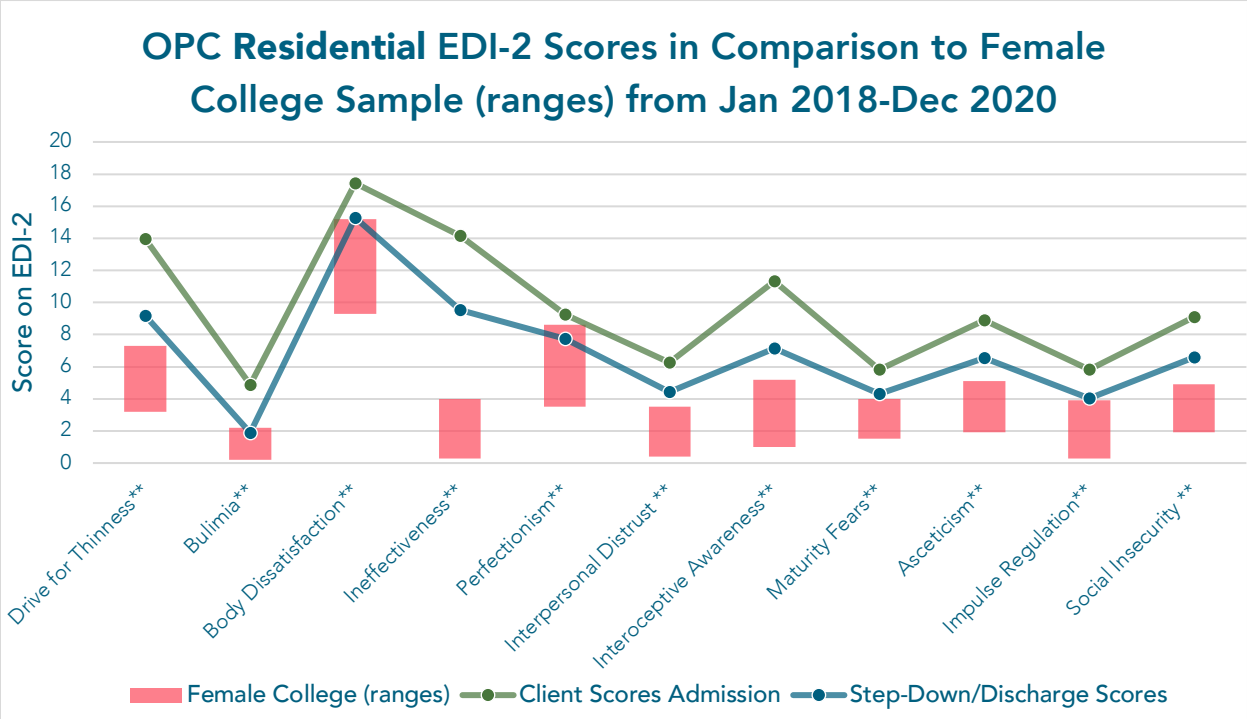
Eating Disorder Inventory (EDI-2) – Adults and Adolescents

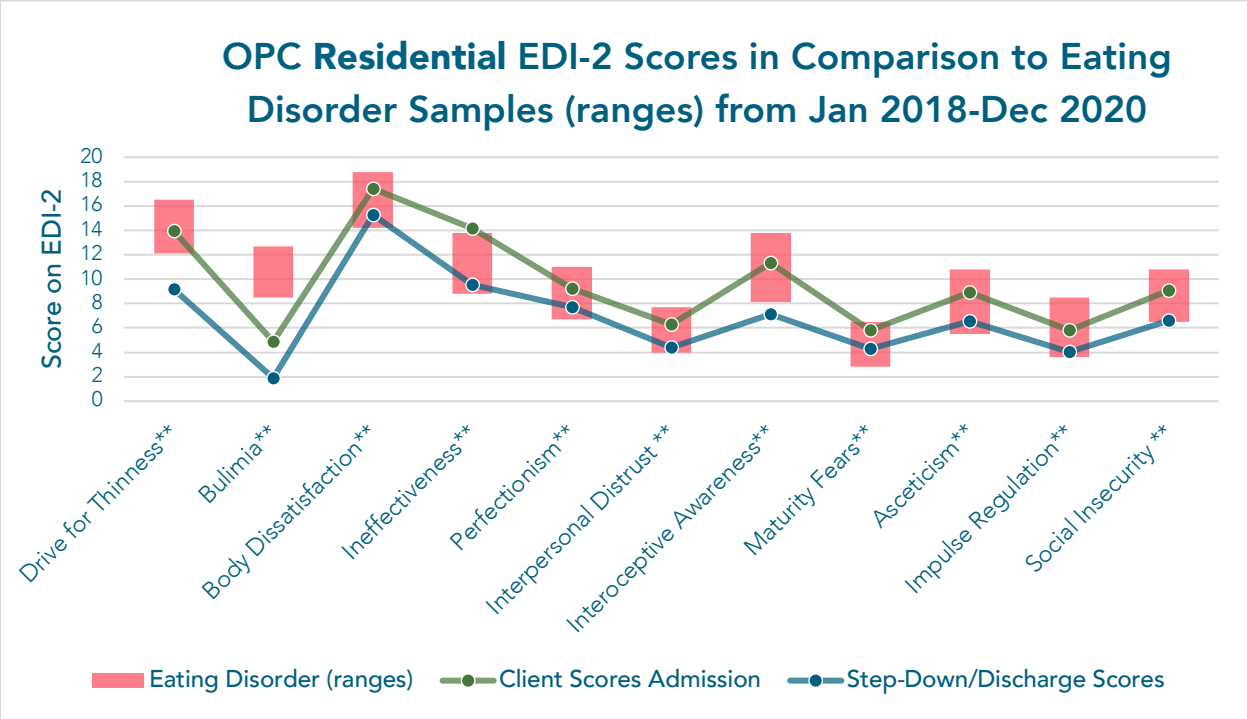
Eating disorder symptomology is also assessed using The Eating Disorder Inventory (EDI-2). The EDI-2 is a self-report measure of symptoms frequently related to anorexia nervosa or bulimia nervosa. This measure was designed to be an aid to forming a diagnosis and not as the exclusive basis for making a diagnosis. It is extremely valuable in guiding treatment planning and clinical work. The EDI-2 provides information regarding the psychological and behavioral dimensions of eating disorders. It has 91 items and 11 subscales. The subscales and a brief description of what they measure are as follows:

1. Drive for thinness (DT): an excessive concern with dieting, preoccupation with weight, and fear of weight gain.
2. Bulimia: episodes of binge eating and purging.
3. Body dissatisfaction: not being satisfied with one's physical appearance.
4. Ineffectiveness: assesses feelings of inadequacy, insecurity, worthlessness and having no control over their lives.
5. Perfectionism: not being satisfied with anything less than perfection.
6. Interpersonal distrust: reluctance to form close relationships.
7. Interoceptive awareness: the ability to discriminate between sensations and feelings, such as hunger and satiety.
8. Maturity fears: the fear of facing the demands of adult life.
9. Ascetism: reflects a tendency to find value in self-deprivation, as well as denial and control of feelings, wants, desires, and urges.
10. Impulse Regulation: the ability to regulate impulsive behavior, especially binge behavior.
11. Social Insecurity: estimates social fears and insecurity.

Results indicate that patients in Residential and PHP demonstrated statistically significant reductions at the $p \leq .01$ level on all 11 subscales on the EDI-2. In IOP, scores demonstrated statistically significant reductions in symptoms for 10 out of 11 subscales.

Below see graphs for the Residential, PHP and IOP levels of care comparing admission and transfer/discharge scores to those of female college students as well as sample of individuals diagnosed with an eating disorder. Of note, in order to most accurately compare our patients' scores with the EDI-2 eating disorder norming sample, we did not include patients diagnosed with ARFID or BED in these specific analyses.


OPC Residential EDI-2 Scores in Comparison to Female College Sample (ranges) from Jan 2018-Dec 2020
Score on EDI-2
20
18
16
14
12
10
8
6
4
2
0
Drive for Thinness**
Bulimia**
Body Dissatisfaction**
Ineffectiveness**
Perfectionism**
Interpersonal Distrust **
Interoceptive Awareness**
Maturity Fears**
Asceticism**
Impulse Regulation**
Social Insecurity **
Female College (ranges)
Client Scores Admission
Step-Down/Discharge Scores


OPC Residential EDI-2 Scores in Comparison to Eating Disorder Samples (ranges) from Jan 2018-Dec 2020
Score on EDI-2
20
18
16
14
12
10
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0
Drive for Thinness**
Bulimia**
Body Dissatisfaction**
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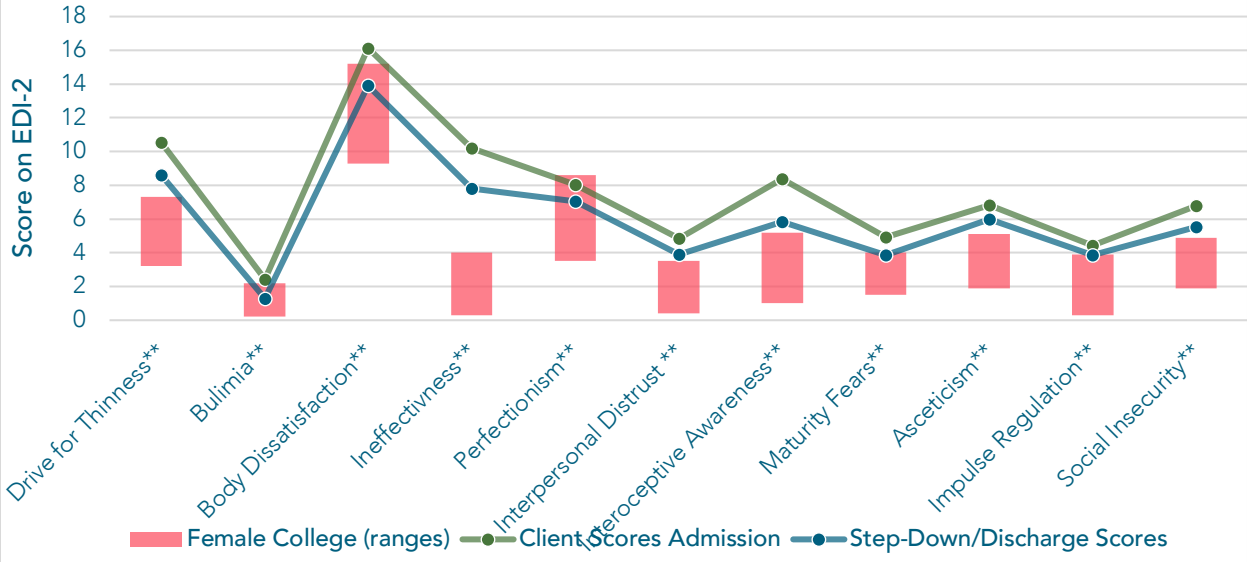
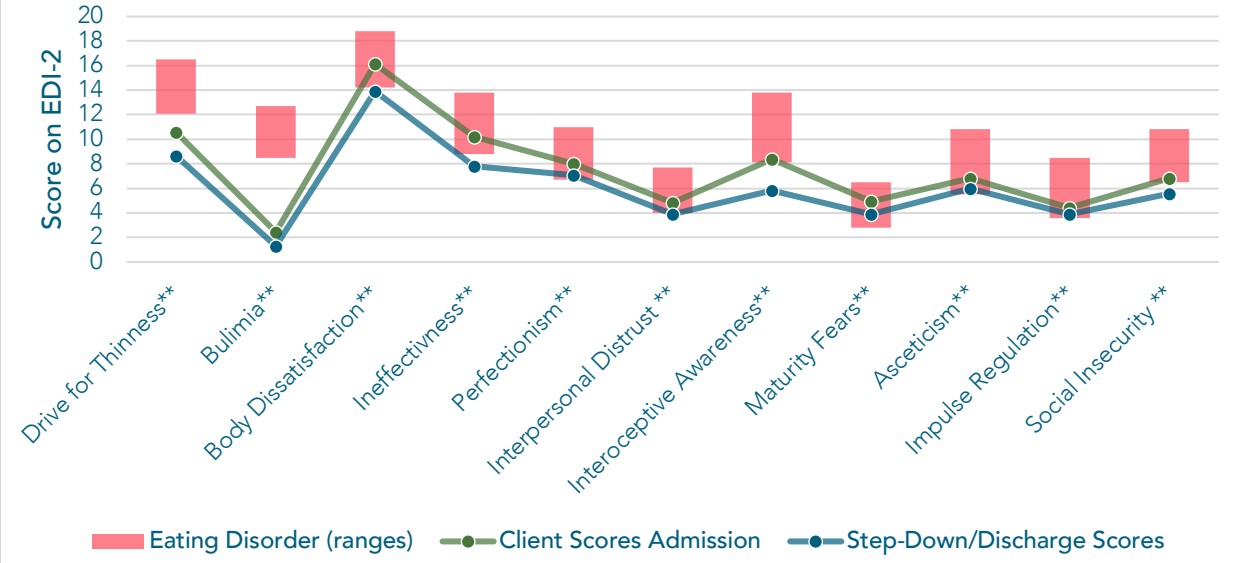
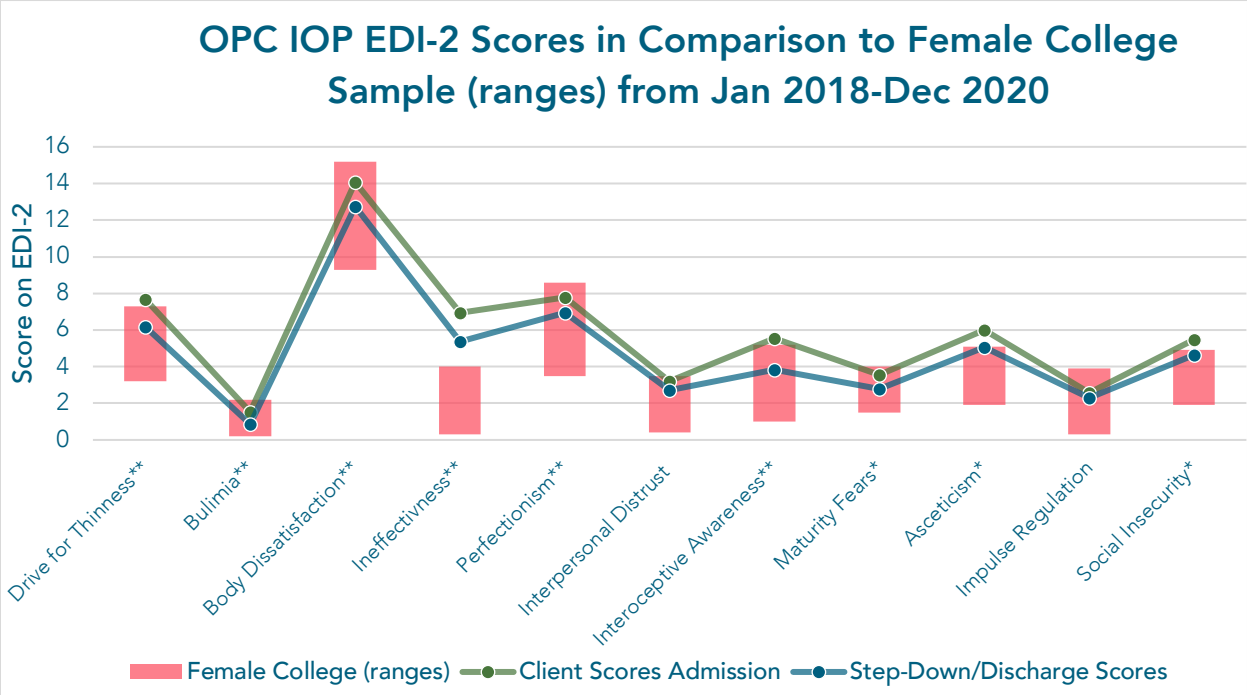
Eating Disorder (ranges)
Client Scores Admission
Step-Down/Discharge Scores

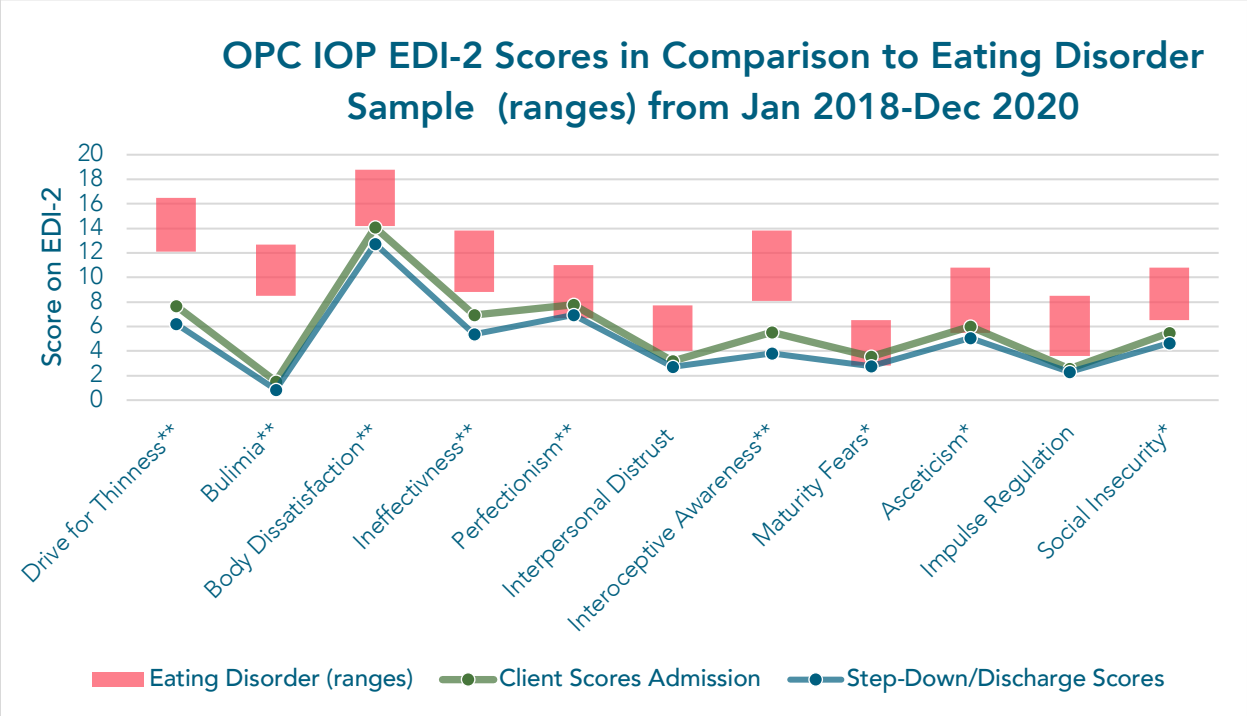
OPC PHP EDI-2 SCores in Comparison to Female College Sample (ranges) from Jan 2018-Dec 2020



OPC PHP EDI-2 Scores in Comparison to Eating Disorder Sample (ranges) from Jan 2018-Dec 2020




OPC IOP EDI-2 Scores in Comparison to Female College Sample (ranges) from Jan 2018-Dec 2020
Score on EDI-2
16
14
12
10
8
6
4
2
0
Drive for Thinness**
Bulimia**
Body Dissatisfaction**
Ineffectivness**
Perfectionism**
Interpersonal Distrust
Interoceptive Awareness**
Maturity Fears*
Asceticism*
Impulse Regulation
Social Insecurity*
Female College (ranges)
Client Scores Admission
Step-Down/Discharge Scores


OPC IOP EDI-2 Scores in Comparison to Eating Disorder Sample (ranges) from Jan 2018-Dec 2020
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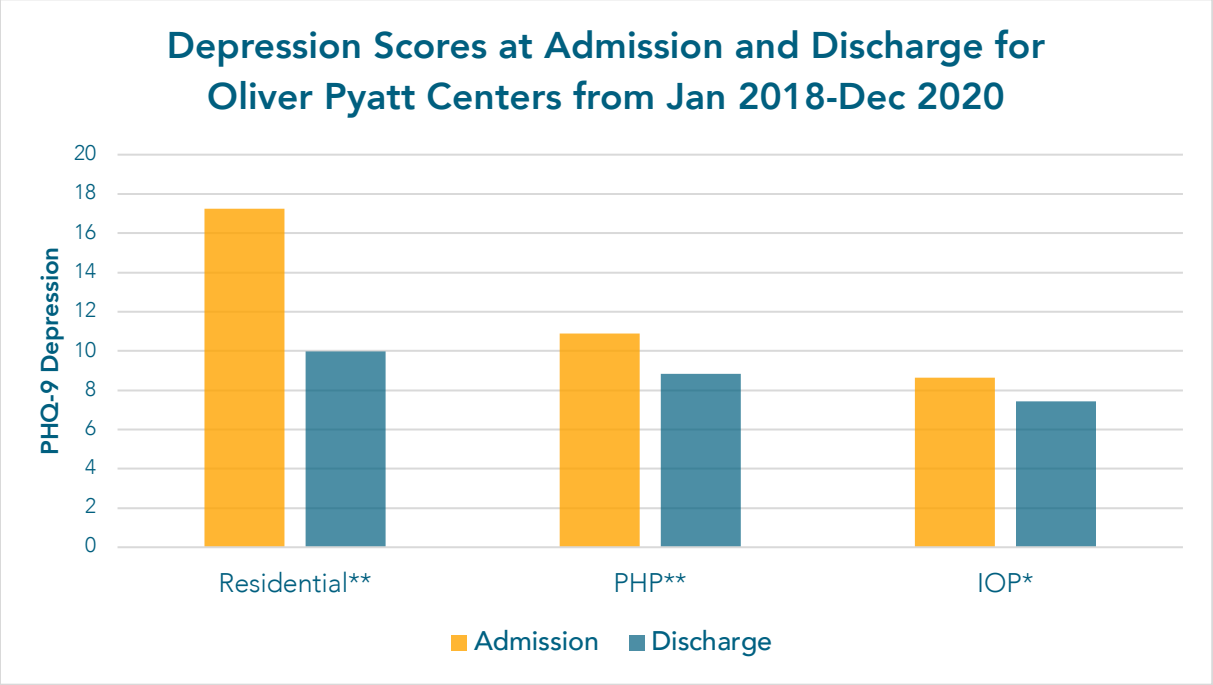
Eating Disorder (ranges)
Client Scores Admission
Step-Down/Discharge Scores

Depression and Anxiety

Symptoms of depression were assessed using the Patient Health Questionnaire-9 (PHQ-9), a nine-item tool used for screening and measuring the severity of depression.

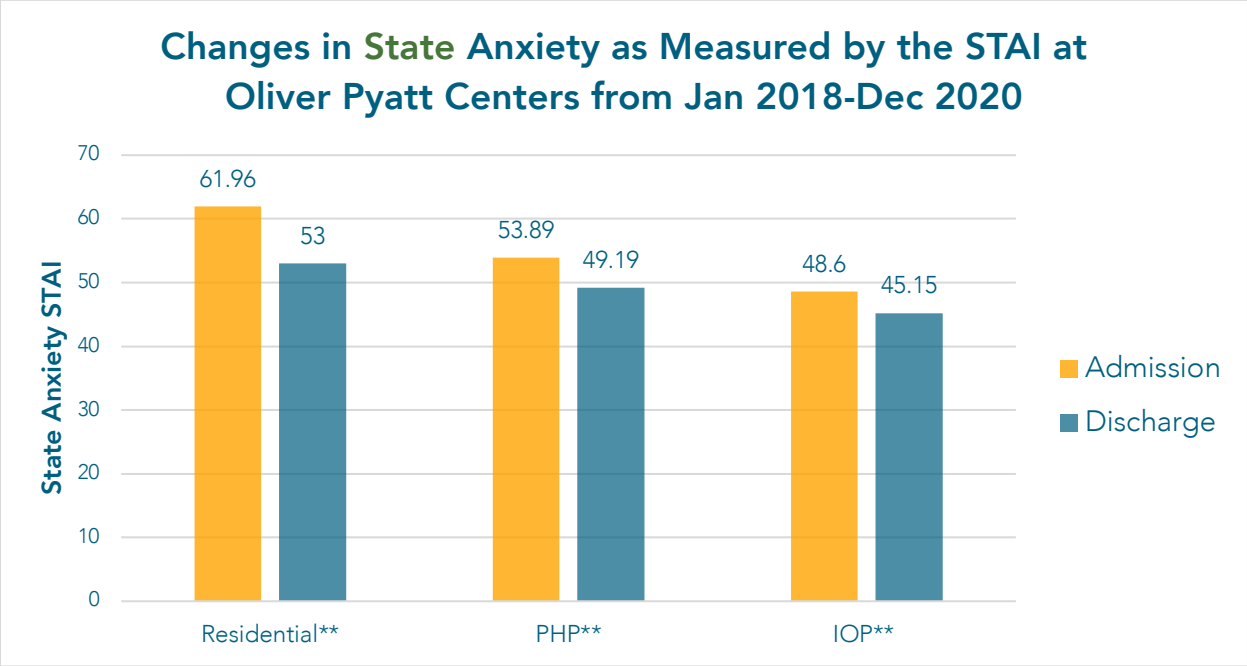
Overall, results show clinically and statistically significant depression symptom reduction across levels of care. On average, scores on the PHQ-9 indicated patients admitted to the Residential Level of Care with "moderately severe" symptoms of depression and reported "mild to moderate" symptoms upon discharge. At the PHP level of care, patients reported on average "moderate" symptoms of depression at the time of admission and reported "mild" symptoms of depression upon discharge. On average, patients admitted to IOP with self-reported "mild symptoms of depression and discharged with further reduced "mild" symptoms of depression. The graph below represents changes in depression scores across levels of care.



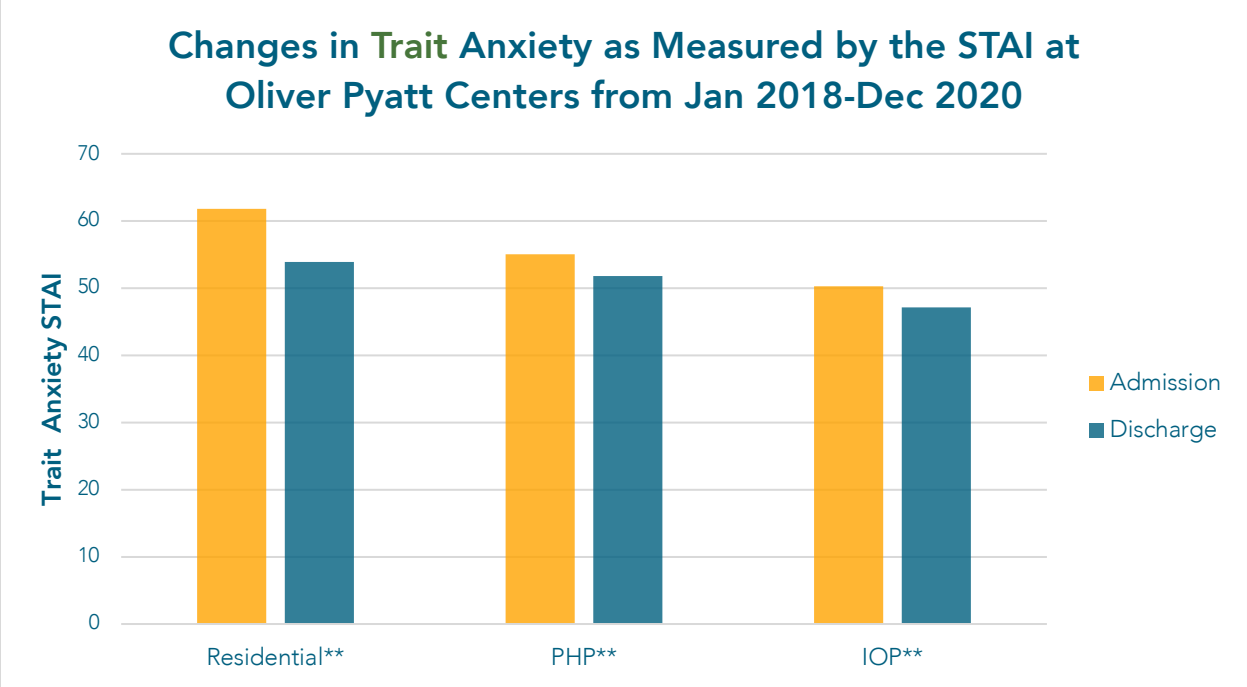
**= Statistically significant change at the p <.01 level
*=Statistically significant change at the p <.05 level

Symptoms of anxiety were measured using the State-Trait Anxiety Inventory (STAI), a 40 item self-report measure of anxiety. This tool assesses the temporary state of feeling

anxious as well as anxiety as a more general and long-standing quality. Scores indicate that patients all levels of care demonstrated statistically significant reductions in both state and trait anxiety from admission to discharge.



** = Statistically significant change from admission to discharge at the p <.01 level



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Posttraumatic Stress Disorder (PTSD)

OPC has also been systematically assessing for the presence and severity of PTSD and its symptoms. The presence of significant life events that either happened to an individual or was witnessed (Criterion A) was recorded after admission using the Life Events Checklist for DSM-5 (LEC-5), and in addition, other PTSD symptoms were assessed at admission and discharge using the PTSD Symptom Checklist for DSM-5 (PCL-5) (Criteria B-E). Results indicate that 46% of individuals admitted to OPC Residential care met criteria for PTSD.

Treatment of PTSD and Complex PTSD

OPC has developed an integrated treatment program to properly assess and treat the high rates of severe trauma, PTSD, dissociation, and related comorbidity that often accompanies EDs, especially those who have not responded to outpatient care. Trauma and PTSD are known factors that can often lead to treatment dropout or failure. In concert with expert consultation, OPC has trained its psychotherapy staff to utilize and integrate Cognitive Processing Therapy (CPT) into the overall, individualized and integrated treatment plan for such patients.