Ai Pono Hawaii Eating Disorder Quality of Life Scale Outcomes

Lifetime Data June 14th, 2023









Table of Contents

Cover		1
Table of Co	ntents	2
About 'Ai F	Pono	3
	'Ai Pono	
Metrics		4-5
	Eating Disorder Quality of Life Scale (EDQLS)	4
	EDQLS Scoring	
	Sample EDQLS Questions	
Overall Sco	pres	6-0
Overall Sco	EDQLS Scores Upon Admission	
	EDQLS Scores Upon Discharge	
	EDQLS Score Change From Admission to Discharge	
	EDQLS Subscale Averages at Admission and Discharge	
	Eating Issues Subscale Averages at Admission and Discharge	
	EDQLS Subscale Score Improvement from Admission to Discharge	9
Residentia	l Treatment Scores	10-11
	EDQLS Scores Upon Admission	
	EDQLS Scores Upon Discharge	
	EDQLS Score Change From Admission to Discharge	11
Virtual Tre	atment Scores	12-13
	EDQLS Scores Upon Admission	12
	EDQLS Scores Upon Discharge	
	EDQLS Score Change From Admission to Discharge	13
	ns	
	What the Numbers Show	
	Limitations	15
Future Dire	ections	
	Further Exploration	
	Citations	15
Back Page		17
	Contact Information	17

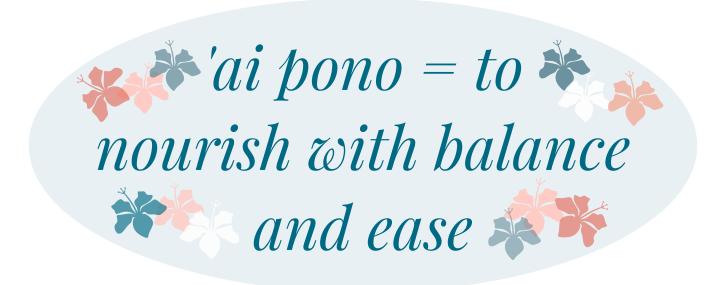


About

'Ai Pono Hawaii

'Ai Pono Hawaii is a Joint Commission accredited eating disorder treatment center offering both residential and virtual treatment programs. The residential center is located on beautiful Maui, Hawaii, and the virtual treatment program is open to all residents of the Hawaiian islands.

'Ai Pono's treatment philosophy is evidence-based, trauma-informed holistic care. 'Ai Pono treats individuals suffering from all eating disorders and aims to help them recover completely and overcome these challenges.



Treatment Outcomes & Demonstrating Effectiveness

This document details the treatment outcomes for clients at 'Ai Pono through our entire lifetime of data collection, which includes outcome scores from November 2015 through June 2023. The outcomes detailed here demonstrate that 'Ai Pono has been able to meet treatment goals and improve the quality of life in individuals with eating disorders through its comprehensive treatment programs.



Metrics

Eating Disorder Quality of Life Scale (EDQLS)

'Ai Pono Hawaii uses the **EDQLS** as a measure of patient progress throughout time in treatment in both our residential and virtual intensive outpatient programs.

The EDQLS is a validated quantitative metric for measuring quality of life as it relates to eating disorders in those who are struggling with eating disorders. It was developed in 2004/2005 and finalized and copyrighted in 2007 by Dr. Carol Adair and colleagues. It went through significant testing and included input from individuals in nursing, dietetics, pediatrics, psychology, psychiatry, social work, and family medicine (all with eating disorder experience)¹.

In addition to the overall score of the EDQLS, it has **twelve subscales** that encompass various aspects of quality of life as it relates to eating disorders. The subscales are cognitive functioning, education/vocation, family & close relationships,

Internet Peer Reviewed Health First Literature Professional3 Patient n = 39 articles Person Interviews (selected by Interviews Narratives n = 10n = 12n = 31228 articles from a systematic search) Initial Item Pool **Item Generation** 233 items in 12 domains Focus Groups Validation of Domains n = 5and Selected Item Testing Team Consensus Item Reduction 130 items Screening Criteria: Directionality/Responsiveness Universality Wording/Ambiguity Two stage Pre-test 130 and 85 items General Likeability 17 patients, 10 family members, 18 health professionals 3 highest rated items in each domain + 3 extra in "eating issues" EDOLS Pilot Version **Final Formatting** 40 items in 12 domains**

Adair et. al, 2007

relationships with others, future/outlook, appearance, leisure, psychological health, emotional health, values and beliefs, physical health, and eating issues.

The EDQLS is responsive, meaning that the scores change to reflect client progress over time, and quality of life has shown to be important—and quite possibly central—in eating disorder recovery². The EDQLS was also designed to minimize response bias attributable to ego-syntonicity.



Metrics

EDQLS Scoring

EDQLS scores range from 40 to 200. The overall score is the cumulative score of the twelve subscale scores. Each of the twelve subscales has three questions associated with it except for eating issues, which has seven questions. All of the subscale scores except for eating issues ranges from 3 to 15, while the eating issues subscale score ranges from 7 to 35.

Sample EDQLS Questions

Each question is rated on a 5-item Likert scale, with answers being strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. Clients are instructed to think about how they have felt in the last week, and then choose the response that best fits for them. Examples of questions found in the EDQLS are:

"My health is more important to me than my physical appearance."

"I feel connected to others."

"I see positive things in my appearance."

"People don't understand me."

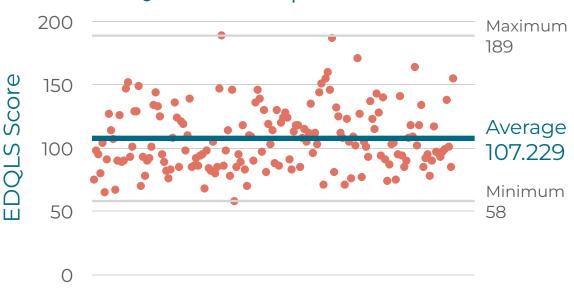
"I can consider my own happiness when making choices."

Validation

The EDQLS is validated in both adolescent and adult populations. It has not yet been validated for use in men, but has been shown reliability in ethnically diverse female populations³. The use of subscales as stand-alone outcomes measures for definitive treatment recommendations has also not been validated, though this questionnaire still shows changes in trends and is an informative tool to provide insight and incorporate into a broader treatment plan.



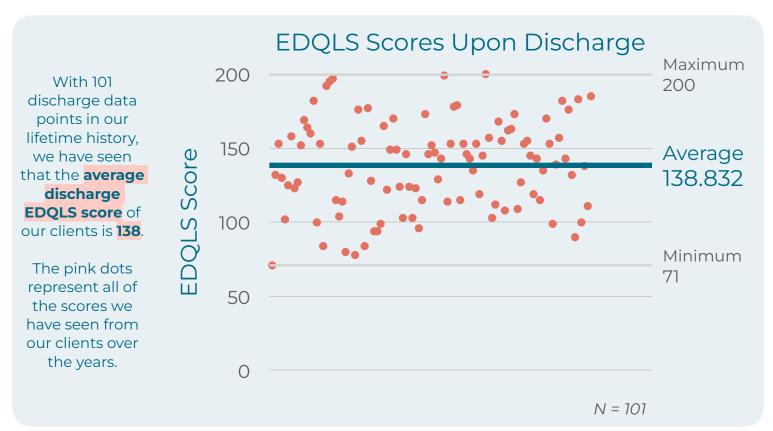




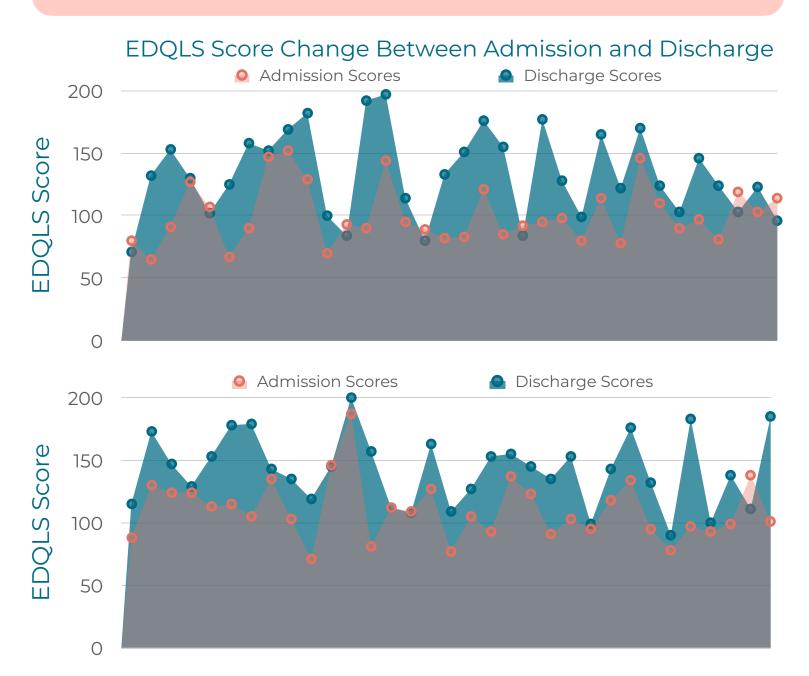
With 170
admission data
points in our
lifetime history,
we have seen
that the average
admission
EDQLS score of
our clients is 107.

The pink dots represent all of the scores we have seen from our clients over the years.

N = 170



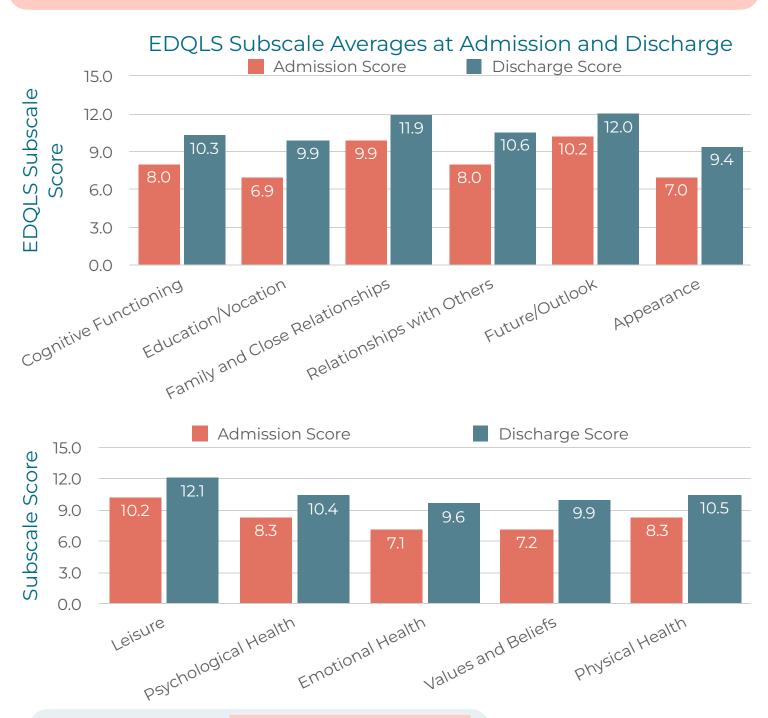




(both graphs together) N = 67

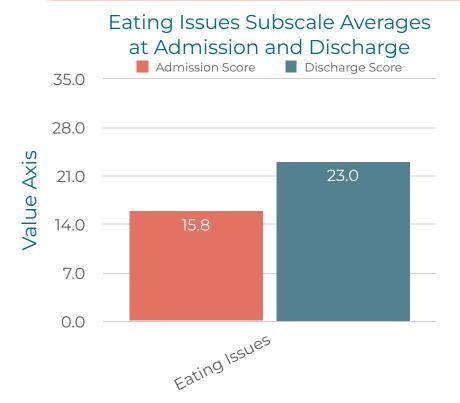
With 67 admission & discharge data points from the same clients in our lifetime history, we have seen that the **average change between admission** and discharge in EDQLS score of our clients is 31 points.





These charts illustrate an average increase in every EDQLS subscale score between admission and discharge. The increases vary across subscales from a 17.3% to 45.4% increase.

(both graphs together) N = 67

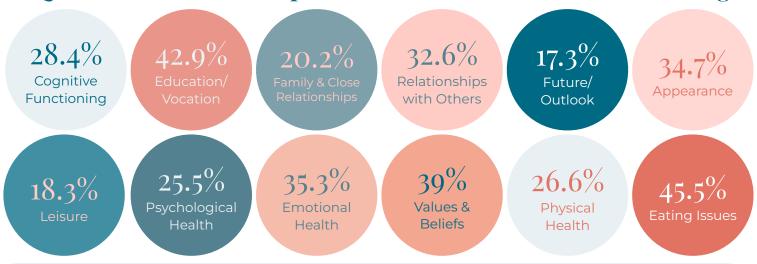


The subscale that saw the largest percentage in increase was Eating Issues, with an average of **45.5% increase** in subscale score between admission and discharge.

While the subscale scores are not validated as measures of definitive treatment recommendation, they are informative.

The data collected from our clients shows substantial improvement over time spent in treatment with 'Ai Pono Hawaii in some of the most challenging aspects of eating disorder recovery: eating issues, education/vocation, values and beliefs, emotional health, appearance, and relationships with others.

EDQLS Subscale Score Improvement From Admission to Discharge



For the 67 clients from whom we have both admission and discharge EDQLS scores, on average every subscale score on the EDQLS **increased**, with nine out of twelve subscale scores improving by **over 25%.**



Residential Treatment Scores





With 140
residential
admission data
points in our
lifetime history,
we have seen
that the average
residential
admission
EDQLS score of
our clients is 105.

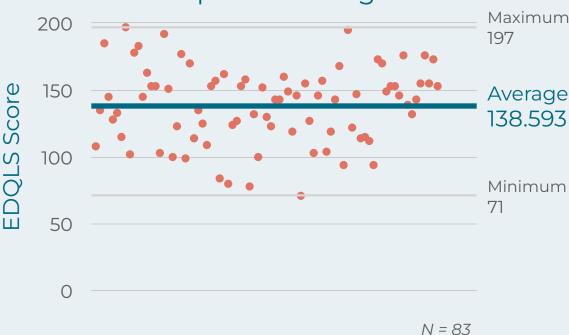
The pink dots represent all of the residential scores we have seen from our clients over the years.

N = 140

With 83 residential discharge data points in our lifetime history, we have seen that the average residential discharge EDQLS score of our clients is 138.

The pink dots represent all of the residential scores we have seen from our clients over the years.

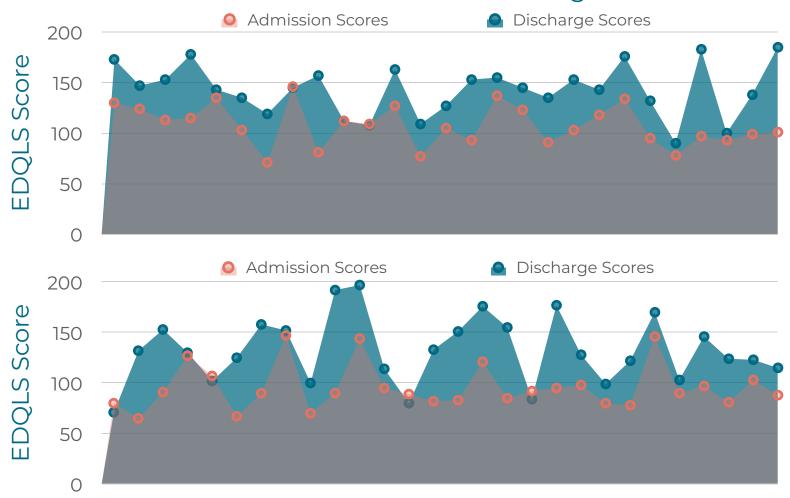






Residential Treatment Scores

Residential EDQLS Score Change Between Admission and Discharge



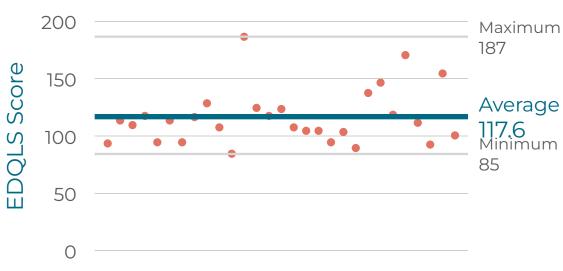
(both graphs together) N = 55

With 55 residential admission & discharge data points from the same clients in our lifetime history, we have seen that the average change between residential admission and discharge in EDQLS score of our clients is points.



Virtual Treatment Scores





With 30 virtual admission data points in our lifetime history, we have seen that the average virtual admission EDQLS score of our clients is 117.

The pink dots represent all of the virtual scores we have seen from our clients over the years.

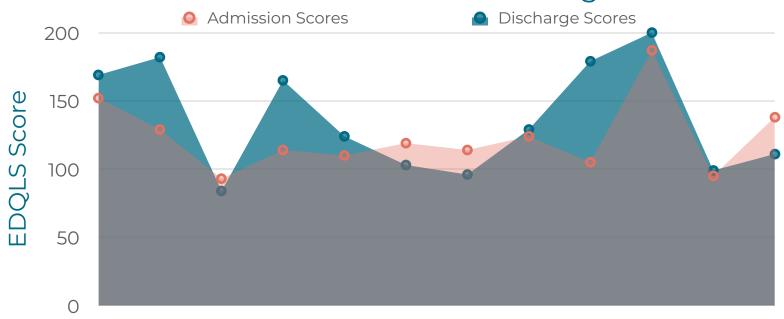
N = 30

VIOP EDQLS Scores Upon Discharge With 18 virtual discharge data Maximum 200 points in our 200 lifetime history. we have seen **EDQLS Score** Average that the average 150 virtual discharge 142.667 **EDOLS** score of our clients is 142. 100 Minimum The pink dots 84 represent all of 50 the virtual scores we have seen from our clients over the years. 0 N = 18



Virtual Treatment Scores

Virtual EDQLS Score Change Between Admission and Discharge



N = 12

With 12* virtual admission & discharge data points from the same clients in our lifetime history, we have seen that the average change between virtual admission and discharge in EDQLS score of our clients is 13 points.

*This sample includes a very limited amount of data, so this 13 point increase is likely less representative of the actual average improvement that will be seen in virtual clients between admission and discharge once more data has been collected.

Conclusions

The information presented in this document is the product of our data collection over the last seven and a half years. Over that time, our data collection system has been altered and refined in order to improve response rate so we can collect the most accurate data possible in order to improve our program and better support our clients in their recovery process.

What The Numbers Show

We are seeing a large increase in EDQLS score over the time our clients are in treatment with 'Ai Pono in our overall data, and this appears to be particularly true for clients in our residential treatment center. We have set a goal to see a 30-point increase in EDQLS between admission and discharge for residential clients, and largely that holds true. We are seeing on average an increase of 31 points across both treatment programs, and a larger average score increase of 35 points specifically for our residential program. This is **nearly a 30% improvement in EDQLS score** over time in treatment at 'Ai Pono.

We are seeing improvement across the board in all subscales of the EDQLS, with the most pronounced improvements in Eating Issues (45.5%), Education/Vocation (42.9%), and Values & Beliefs (39%). While not validated as stand-alone measures for treatment, they are informative and show that change is occurring in our clients

The improvement in EDQLS scores for residential clients appears to be larger than for virtual clients, which logically follows considering residential treatment is a higher level of care. Clients seeking residential treatment on average score lower on the EDQLS upon admission than those who participate in our virtual treatment program.

The results of our data suggest 'Ai Pono's treatment programs and philosophy are successful in treating eating disorders and improving quality of life in our clients.



Conclusions

Limitations

The EDQLS is a self-report metric, so it is subject to personal bias and lack of awareness about severity of eating disorder behaviors to some extent. However, the development of the EDQLS did take ego-syntonicity into account, so this effect may be smaller with this metric than other metrics. Regardless, the EDQLS is still a responsive measure, so it does show improvement, even in those who lack accurate perception in severity of their illness.

We are seeing some instances where a client's EDQLS score at discharge is lower than it was at admission, though this negative change in score is much lower than the positive changes we see in most of our clients. More data must be analyzed to confirm, but it is likely many of these scores are for clients who are being referred to a higher level of care due to severity and frequency of eating disorder behaviors. This is something we will explore in the next iteration of this report for more conclusive information.

We are also currently seeing potential limits in the accuracy of our data for our virtual intensive outpatient program due to a smaller sample size, though our wealth of data for our virtual program grows with survey answers being collected monthly. We will have more solid answers about the success of this program soon, though current results look promising as they are still showing improvement in score between admission and discharge.

Future Directions

The data collected thus far from 'Ai Pono clients shows insights into the treatment outcomes of our programs. We intend to continue improving and refining our data collection process in order to gather more data and get a more comprehensive look at how our programs are impacting our clients, and how we can further improve our treatment programs.

Further exploration we intend to pursue through future outcomes research may include:

- * outcomes as they correlate with eating disorder diagnosis
- * outcomes as they correlate with program completion
- * outcomes for individuals who complete both our residential and virtual programs
- * continued progress post-discharge from 'Ai Pono programs
- * reduction in depression symptoms/severity
- * reduction in anxiety symptoms/severity
- * reduction in disordered eating behaviors & thoughts

Citations

- 1. Adair, C., Marcoux, G., Cram, B., Ewashen, C., Chafe, J., Cassin, S., Pinzon, J., Gusella, J., Geller, J., Scattolon, Y., Fergusson, P., Styles, L., & Brown, K. (2007). *Development and multi-site validation of a new condition-specific quality of life measure of eating disorders*. Health and quality of life outcomes. 5. 23. 10.1186/1477-7525-5-23
- 2. Mitchison, D., Dawson, L., Hand, L., Mond, J., & Hay, P. (2016). Quality of life as a vulnerability and recovery factor in eating disorders: a community-based study. BMC Psychiatry 16, 328. https://doi.org/10.1186/s12888-016-1033-0
- 3. Akoury, L.M., Rozalski, V., Barchard, K.A., & Warren, C.S. (2018). *Eating Disorder Quality of Life Scale* (EDQLS) in ethnically diverse college women: an exploratory factor analysis. Health Qual Life Outcomes 16, 39. https://doi.org/10.1186/s12955-018-0867-1

Questions, Comments, & Concerns

If you have any questions, comments, or concerns regarding this data, document, or our program, please don't hesitate to reach out to us at our website (https://www.aipono.com/) or by phone (+1.855.249.9992).

If you have any worries about yourself or a loved one and want to pursue eating disorder treatment, let us know. We would love to serve you on your recovery journey.







