

WeightAware 3.0 Client Review Document

Overview

The WeightAware HRA uses body mass index (BMI), quality of life (QoL), and health history to assess possible eligibility for weight-loss surgery. ^{1,2,3,4} It also calculates the number of pounds away from the healthy weight range (BMI = 24.9) for overweight users and gives a weight-loss recommendation. ^{5,6}

Main Scientific Basis

This HRA was designed using the both the 2022 indications for metabolic and bariatric surgery cosponsored by the American Society for Metabolic & Bariatric Surgery (ASMBS) and the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO) ¹ and the 2019 clinical practice guidelines cosponsored by the American Association of Clinical Endocrinologists (AACE), The Obesity Society (TOS), and the ASMBS².

Product Description

The WeightAware HRA asks a series of health history questions and uses clinical practice guidelines to identify possible bariatric surgery candidates. ^{1,2,3,4} The HRA also makes a weight loss recommendation irrespective of surgery eligibility. ^{5,6} Several weight-related health conditions are identified, including: hypertension, abnormal cholesterol, prediabetes or type 2 diabetes, arthritis, asthma, obstructive sleep apnea, gastroesophageal reflux disease, urinary incontinence, obesity-hypoventilation syndrome, pseudotumor cerebri, nonalcoholic liver disease, and venous stasis disease.

Key Results Provided

The primary result from the WeightAware HRA is eligibility for bariatric surgery. In cases where users are not surgery candidates, weight loss or a quality of life follow-up may be recommended. Results are categorized as possible surgery candidate, screening needed to determine eligibility, weight loss recommended, recommend "quality of life" follow-up, weight loss may be recommended, weight loss not recommended. Follow-up messaging, emails, and programs can be developed to align with these categories.

About Bariatric Surgery Eligibility

In the following 3 cases, bariatric surgery may be recommended: class 3 obesity (BMI = 40 or higher); class 2 obesity (BMI = 35.0-39.9) with a weight-related health condition or greatly impaired QoL;² class 1 obesity (BMI = 30.0-34.9) with uncontrolled type 2 diabetes.³ People who are class 2 obesity with no weight-related health conditions or class 1 obesity with controlled type 2 diabetes will be provided with a "More Info Needed" message and referred for follow-up due to inconsistencies between current published guidelines. ^{1,2} People with class 1 or class 2 obesity who don't answer enough questions to determine surgery eligibility are also referred for follow-up.

For individuals who indicate Asian ethnicity the following BMI weight classifications¹ are used:

- 23 to 24.9 kg/m² overweight
- 25 to 29.9 kg/m² obese class 1
- 30 to 34.9 kg/m² obese class 2
- > 35 kg/m² obese class 3

Weight loss surgery recommendations for Asians align with the guideline threshold of a BMI of 27.5. 1,2

About Weight Loss Recommendation

Weight loss is recommended for people with obesity (BMI = 30 or higher, BMI 25 or higher Asians) and for people with overweight (BMI = 25.0-29.9 or 23-24.9 Asians) who have a weight-related health condition or increased waist circumference.^{4,5} Overweight people with no weight-related health conditions are told to avoid weight gain. Those who don't answer enough questions to determine a weight-loss recommendation are referred for follow-up.

The Role of QoL

The impact of weight on QoL is used in the bariatric surgery algorithm but not in the weight loss recommendation. Regardless of surgery eligibility or weight-loss recommendation, people who report that their weight greatly impacts their QoL are urged to talk to a healthcare professional about their weight.

References

- Eisenberg D, Shikora S, Aarts E, Steele K, Suter M, Kothari S, et al. 2022 American Society for Metabolic and Bariatric Surgery (ASMBS) and International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO): Indications for Metabolic and Bariatric Surgery. Surg for Obesity and Related Diseases. October 20, 2022. 18:12;1345-1356. https://www.soard.org/action/showPdf?pii=S1550-7289%2822%2900641-4 Accessed Jan 26, 2023.
- Mechanick JI, Apovian C, Brethauer S, et al. Clinical practice guidelines for the perioperative nutritional, metabolic, and nonsurgical support of the bariatric surgery patient—2019 update: cosponsored by American Association of Clinical Endocrinologists/American College of Endocrinology, The Obesity Society, and American Society for Metabolic & Bariatric Surgery, Obesity Medicine Association, and American Society of Anesthesiologists. Endocrine Practice. December 2019;25(No. 12): 1-75.
 https://www.endocrinepractice.org/action/showPdf?pii=S1530-891X%2820%2942802-2 Accessed May 17, 2021.
- American Diabetes Association. Standards for the treatment of type 2 diabetes 2020: 8. Obesity Management for the treatment of type 2 diabetes. *Diabetes Care*. 2020;43(Suppl. 1):S89–S97. https://doi.org/10.2337/dc20-S008.
- Pratt JSA, Browne A, Browne MT. ASMBS pediatric metabolic and bariatric surgery guidelines, 2018. Surg for Obesity and Related Diseases. July 1 2018. 14:7;882–901.
 https://asmbs.org/app/uploads/2018/08/PIIS155072891830145X-Pediatric-in-Press.pdf. Accessed May 17, 2021.
- Jensen MD, Ryan DH, Apovian CM, Ard JD, Comuzzie AG, Donato KA, et. al. 2013 AHA/ACC/TOS
 Guideline for the Management of Overweight and Obesity in Adults: A Report of the American
 College of Cardiology/American Heart Association Task Force on Practice Guidelines and The Obesity
 Society. Circulation. 2013;00.000-000. DOI: http://dx.doi.org/10.1161/01.cir.0000437739.71477.ee
- 6. Grundy SM, Cleeman JI, Daniels SR, et al. Diagnosis and management of the metabolic syndrome: an American Heart Association/National Heart, Lung, and Blood Institute Scientific Statement.

 Circulation. 2005;112:2735-2752. DOI: https://doi.org/10.1161/CIRCULATIONAHA.105.169404