VERIFICATION UNDER OATH

STATE OF VERMONT
GREEN MOUNTAIN CARE BOARD

In re: Kahm Clinic IOP-PHP
Eating Disorder Treatment Program
GMCB-009-21con

Verification Under Oath

Nicholas Kahm, being duly sworn, states on oath as follows:

1. I am the Chief Executive Officer of Kahm Clinic IOP-PHP, LLC. I have reviewed the Certificate of Need Application (Application) to begin an IOP-PHP eating disorder treatment program.

2. Based on my personal knowledge, and after diligent inquiry, I attest that the information contained in the Answers to First Set of Questions is true, accurate and complete and does not contain any untrue statement of a material fact, and does not omit to state a material fact.

3. My personal knowledge of the truth, accuracy and completeness of the information contained in the Application is based on my actual knowledge of the subject information or upon information reasonably believed to be true and reliable to me (for example information in published articles).

4. In the event that the information contained in the Application becomes untrue, in accurate or incomplete in any material respect, I acknowledge my obligation to notify the Green Mountain Care Board as soon as I know that the information or document has become untrue, inaccurate or incomplete in any material respect.

Nicholas Kahm

On June 9th, 2022 Nicholas Kahm appeared before me and swore to the truth, accuracy and completeness of the foregoing.

John D. Kerr

Notary Public

My Commission expires 1/31/2023

Notary Public State of Vermont
John D. Kerr
Commission * No. 157.0004015 *
My Commission Expires 1/31/2023

Kahm Clinic Response

Introduction

The Kahm Clinic is writing in response to the opinion from Marcia Herrin about the merits of the metabolic and body composition testing that are a small part of the proposed IOP/PHP eating disorder treatment CON project. At the outset, we note that 98% of the model that will be followed is identical to what other IOPs and PHPs are doing and squarely within the conservative and static promulgated practice standards. Kahm Clinic finds extensive value in and wants to use high end medical machines that help us give our patients better nutrition recommendations.

We acknowledge that there is intense professional polarization within the eating disorder field, and not all are ready to adapt the same testing model; but don't believe the polarized positions belong in the CON review process. By way of example, Dr. Herrin finds issue with the use of testing Kahm Clinic is advancing while she advocates that FBT must include "open weighing," a practice that is not evidence based (based on the authorities applied in the opinion) and highly debated in the eating disorder community.[1] Some assert that the practice of open weighing is extensively anxiety producing as there is nothing someone suffering from Anorexia Nervosa is more afraid of than gaining weight. Nonetheless, Kahm Clinic acknowledges that weight as a measure is appropriate in eating disorder treatment; the same is true for the metabolic

[1] Murray et al, 2020, who are currently conducting a large study on the topic write, "No best practice guidelines exist in determining optimal practices around weighing patients." Froreich et al., 2020 write that it is "a point of debate in the field. . . . specific and compelling evidence that open weighing is preferable for patient outcome is lacking. Moreover, weighing practices by eating disorder professionals, even those who endorse a CBT or FBT orientation, is far from unanimous: only about half of eating disorder clinicians subscribe to open weighing whereas the other half report using blind weighing procedures." The American Psychiatric Association, Academy of Nutrition and Dietetics, and the Joint Commission do not mention open weighing at all. The Academy of Eating Disorders mentions it, but they are neutral and do not recommend using it over blind weighing. There is certainly no endorsement of open weighing by any of them.

and body composition testing. We also note, and provide more detail below to support, that the very studies cited in the expert opinion contradict the expert conclusions offered.

While we try to respond in the point by point model provided, there are certain things in these statements that we have no ability to address. For example, unidentified quotes from phone calls and characterizations of information taken from confidential treatment with former Kahm Clinic patients. We suggest it would be improper to consider these statements and request that they be stricken.

Finally we want to note that this kind of a review is inconsistent with prior CON proceedings and the scope of review. The HRAP Standard 1.2 provides:

> ◆ **CON STANDARD 1.2:** Applicants seeking to expand or introduce a specific health care services shall show that such services have been shown to improve health. To the extent such services have been the subject of comparative effectiveness research, an applicant shall show that the results of this research support the proposed project.

The GMCB has been provided with the Kahm Clinic's outpatient experience in using the treatment modalities of concern as has found their use to improve health of the patients. It is not required there be comparative effectiveness research available (which is the standard the expert is applying), as the bar is set intentionally lower – which allows for progress (please see Laura Hill's letter).

Indeed, in the Silver Pines matter, the Board's opinion, discussing a similarly newer and developing modality offering information to build treatment plans, stated:

> 13. The Vermont Department of Health's Division of Alcohol and Drug Abuse Programs (ADAP) expressed concern that "machine learning and neural network models have not been fully tested on the population [Silver Pines] will be serving. . . . The applicant acknowledged that this is true, but explained that the model will not be relied upon as the primary source of care until it has treated a sufficient number of patients and behaves in a way that has been proven to be helpful for clinical staff. . . "

In re Application of Silver Pines, LLC, GMCB 016-19con, Statement of Decision and Order.[2]

The following response follows the format of the expert opinion, in the usual GMCB question and response structure. The only thing not included is the discussion of lab work, but on that topic we are in agreement with Dr. Herrin. To the extent she referred to the guidelines about recommending the DEXA scan,[3] we are currently in discussion with UVMMC about using their DEXA machine at the same time that our patients get lab work done. The opining expert does not have clinical expertise in PHP or IOP programs. Nor does she have expertise in the use of metabolic testing and body composition analysis devices within a partial hospitalization or intensive outpatient program for the treatment of eating disorders. She has never used the devices and has no experience with them at all; and has not engaged in dialog about the uses relying on the limited question and answer format of the CON process. We wish that she had kept an open mind about newer treatment modalities.

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GMCB Request

7. A review of the literature that describes the information generated by the devices and how this information can be applied in the treatment of individuals with eating disorders in PHPs and IOPs.

[2] We intend to partly use our database for similar purposes. After it is sufficiently large, we can use artificial intelligence to help us gain clinical insights from the data set which can be expressed in algorithms that can help us better treat our patients. We also intend to hand over the data to researchers to promote research on metabolic testing and body composition analysis in eating disorder treatment. In fact, we already have IRB approval to use the data set that we are currently collecting in our practice. In a few years we will have excellent data for researchers to much better address the topic on which the board solicited the professional opinion.

[3] Lock J, La Via MC; American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). Practice parameter for the assessment and treatment of children and adolescents with eating disorders. J Am Acad Child Adolesc Psychiatry. 2015 May;54(5):412-25. doi: 10.1016/j.jaac.2015.01.018. PMID: 25901778.

Professional Opinion

a. Most commercially Metabolic Testing devices do not give accurate or reliable results (Delsoglio et al., 2020). Kaviani et al. (2018) tested 8 indirect calorimetry instruments including Cosmed instruments and concluded the same: "Several indirect calorimetry (IC) instruments are commercially available, but comparative validity and reliability data are lacking. Existing data are limited by inconsistencies in protocols, subject characteristics, or single-instrument validation comparisons. New generations indirect calorimeters may prove more accurate (Delsoglio et al., 2020). The usefulness of Metabolic Testing in treatment of eating disorders has not been confirmed. In a literature review, only one study (Kochavi et al., 2020) was found that tested the relevance of metabolic testing using an indirect calorimetry machine (Deltatrac metabolic monitor) in the treatment of 60 hospitalized patients with anorexia nervosa and bulimia. The researchers concluded that "measured REE cannot be used to assess the required caloric intake of patients with AN during renourishing, hence it is likely not clinically useful in the planning of nutritional rehabilitation in these patients." The well documented changes in fluid balances that occur in renourishing eating disordered patients likely contributes to the impracticality metabolic testing for these patients. The authors conclude, "Thus, clinical judgment seems still to be the best approach in the planning of nutritional rehabilitation of patients with AN (anorexia nervosa)."

i. Kaviani, S., Schoeller, D. A., Ravussin, E., Melanson, E. L., Henes, S. T., Dugas, L. R., ... & Cooper, J. A. (2018). Determining the accuracy and reliability of indirect calorimeters utilizing the methanol combustion technique. Nutrition in clinical practice, 33(2), 206-216.

ii. Delsoglio, M., Dupertuis, Y. M., Oshima, T., van der Plas, M., & Pichard, C. (2020). Evaluation of the accuracy and precision of a new generation indirect calorimeter in canopy dilution mode. Clinical nutrition, 39(6), 1927-1934.

iii. Kochavi, B., Mendelowitsch, S., Enoch-Levy, A., Yaroslavsky, A., Toledano, A., Modan-Moses, D., & Stein, D. (2020). Resting energy expenditure in acutely ill and stabilized patients with anorexia nervosa and bulimia nervosa. International Journal of Eating Disorders, 53(9), 1460-1468.

Kahm Clinic Response:

In response to all parts (a, b and c) of question 7, We strongly encourage the reviewers of this application to read, in their entirety, the articles cited. While we will do our best to summarize the points of each article in response to her summary, it is important to note that when reading each of the studies in their entirety, you will quickly realize that the studies in no way are opposed to what we do and if anything, they **support** what we do.

The expert's response to question 7a starts out by citing a study completed by Delsoglio et al. testing the accuracy and reliability of the COSMED Q-NRG indirect calorimeter. This is the machine we currently use at The Kahm Clinic. The conclusions of Delsoglio et. al. state that Q-NRG is very accurate and precise in all measurements. It states that the canopy test should be completed in a properly ventilated environment and that there should be proper completion of calibrations. Currently, we calibrate the gasses and internal turbine flowmeter exactly per the manufacturer's recommendations, and we have the machine serviced on regular intervals per the manufacturer's timeline. In the discussion and conclusion of the Delsoglio et. al. study, the authors write, "*results showed CV $\leq$ 3% and CV $\leq$ 1.5% for intra and inter-unit precisions*

respectively. These results are impressive, especially as part of the accuracy and variability could be due to an error in the precision mass flow controller (±0.6%).” Additionally, the study’s final conclusion reads: *“we concluded that the new Q-NRG indirect calorimeter is accurate and precise. It can be applied for longitudinal studies and units can be interchanged with no influence on the results.”*

It seems that in the expert’s response she copied and pasted a piece of the study’s background which reads, “Most commercially Metabolic Testing devices do not give accurate or reliable results.” If you continue to read the same paragraph that the expert extracted this sentence from, you will see the following statement: “Therefore, an innovative device (Q-NRG COSMED, Rome, Italy) that matches clinicians’ needs has been developed as part of the multicenter ICALICs study supported by the two academic societies ESPEN and ESICM.” All research acknowledges the limitations of the subject being addressed and researched before presenting its findings and conclusions. It is clear that this study is in full support of the COSMED Q-NRG and suggests it is accurate and reliable, in fact, it is the most accurate and reliable Metabolic Test on the market.

The next study referenced is Kaviani et. al. which is again, a study that in its conclusions, confirms the accuracy and reliability of the COSMED Metabolic Test. The expert, again, copy-pasted a sentence from the background of the study. If you continue to read beyond that sentence it says that because the validity and reliability data are lacking, this study aims to compare the accuracy and reliability of various IC (Indirect Calorimetry) machines. The Kaviani et. al. study concludes that COSMED was determined along with three others to be the MOST reliable instruments. It continues by stating that COSMED along with only one other metabolic machine showed reliability at both study sites for all three outcome measures. The

study states that not all IC machines are accurate and reliable but concludes that of the machines they tested, COSMED was accurate and reliable.

The assertions are not supported because both articles make exactly the opposite points than what the expert claims they make.

The whole point of the Kochavi et al., 2020 article is that one cannot use the metabolic test to derive a caloric recommendation for AN or BN patients. We fully agree with the conclusion, and we do not deduce the required calories from the measured resting energy expenditure (REE)! This is a straw man argument on the expert's part.

It is worth making the point that Kochavi et al. does not really address our patient population since the participants of that study were hospitalized[4] and as such far sicker than the patients that we will treat, thus the difference between measured and expected REE will be far greater than we will see. Nevertheless, we are well aware that the Harris-Benedict equation overestimates REE when AN patients are very low weight and that it underestimates it during renourishment. We see this metabolic adaptation all the time in our outpatient practice, and it makes sense due to what we know about caloric needs during recovery. In people with normal weight the Harris-Benedict equation is within 10% accuracy. Thus, as a patient becomes healthier and healthier, that number becomes more and more accurate. However, if we can use their premorbid weight we do get an accurate number. Also, not all of our patients are very low weight and for them the machine is very accurate.

What we do see from the metabolic test in very low weight patients is that their metabolic rate is well below where it needs to be, namely, they are hypometabolic. Even with metabolic adaptation we can clearly see this. And letting them know that they are

[4] ". . . as the sample included only inpatients, our findings cannot be generalized to patients with less severe EDs." (Kochavi et al., 2019, p.1467).

hypometabolic and discussing it is clinically very useful in motivating them to start eating more so that they become healthy and stronger. The REE shows us how their body has adapted to survive and how severe the restriction has been - it is a great motivator for them to improve. We do not use the REE to create a calorie recommendation for a meal plan.

There are a few additional points we would like to make concerning Kochavi et al. There is an abundance of literature showing that measured REE in malnourished patients with AN is significantly lower than healthy controls. Furthermore, in renourishing these patients, there is an incredible increase in their REE. We would like to point out that this is exactly what we see with great accuracy – the eating disorder disrupts their metabolism and refeeding reestablishes it powerfully. Showing the patient this sickness and recovery is incredibly useful in clinical treatment.

Kochavi et al. did not track lean body mass (LBM) and fat, i.e., they did not track body composition, although they did discuss them quite a bit. Thus, they conclude: “This precluded us from relating to REE through LBM, considered more accurate than the absolute REE values reported by us.” All of this is to say that Metabolic Testing in combination with Body Composition Analysis is far better than Metabolic Testing alone which is why our program is designed as it is.

Furthermore, Kochavi et al. conclude that measured REE is correlated to a patient’s overall weight but overall weight doesn't take into account a fluid shift. Since weight is correlated to the change in measured REE, we, however, do use the Body Composition Analysis in concordance with the metabolic test to see if that weight gain was essential lean mass or just a jump in fluids. If an ED patient gains mostly fluid, this will go undetected by a simple scale weight or BMI. As a result, the patient could be discharged from treatment too

soon due to meeting the “weight requirements.” A simple scale weight does not tell the whole picture of a patient’s recovery. We, unlike others, are able track fluid shifts with the Body Composition Analysis in order to determine whether weight gain in treatment equates to actual lean healthy tissue recovery.

Kochavi et al. also confirm that we are, in fact, seeing metabolic adaptation in acutely ill and stabilized patients with eating disorders. Metabolic adaptation is the process in which bodies respond to starvation. When a patient with an eating disorder engages in restrictive behaviors, limiting caloric intake over a prolonged period of time, their metabolism will decrease in an effort to conserve energy expenditure in a low-calorie state, and prioritize the function of critical organs and survival systems. As a result, we will see a measured metabolic rate much lower than the metabolic rate as determined by a predictive equation. This is a very important aspect of the study to note because the study is acknowledging that we are seeing deviations in measured REE from the calculated values. Therefore, knowing a patient’s measured REE will only help in determining best clinical judgment to know exactly what those metabolic deviations are.

Another notable aspect of the Kochavi et. al. study is that the metabolic rate of BN patients is affected by their ED behaviors. The study determined that BN patients' increase in measured REE was a result of decreasing ED behaviors. This affirms the need for measuring RMR as a good way of getting an accurate picture of a patient’s use of ED behaviors. In a PHP/IOP setting, we don't have eyes on our patients 24/7; they could very easily be using ED behaviors outside of programming and then being deceitful about it. This happens ALL of the time in ED treatment. If we are seeing that their metabolic rate is not improving, it could be a good indicator to us that they are still using behaviors and indicate to the clinicians a new plan of action for the best care for that patient.

The Kochavi et. al. study does conclude that ultimately, the nutritional needs of a patient come down to clinical judgment. The Metabolic Test and Body Composition Analysis help the treatment team to make more informed clinical decisions.

Professional Opinion

b. The accuracy and clinical value of body composition analysis machines is not established. The major problem in their use in the assessment and treatment and in eating disorders is that results from BIA machines rely on assumptions based on populations mean values and cannot be applicable to all patients (Ward, 2019). A recent study by Popiołek et al. (2019), is the first study to compare anthropometrical and BIA parameters in 46 patients diagnosed with anorexia nervosa. This group found that BIA correlated well with BMI. The researchers did not investigate the same parameters for healthy controls. The authors concluded that selected BIA and anthropometrical parameters could be used for AN patients' assessment and then during in the recovery process but studies have not yet been conducted to assess the efficacy of BIA. Using BMI and BMI percentages for age for child and adolescent patients is part of standard treatment for eating disorders at all levels of care. An excellent paper by Cindy Bulik (Abbaspour et al., 2021) of University of North Carolina and her international research team compared DEXA scans to BIA in adult patients with anorexia nervosa (AN). They concluded that at this point the DEXA should remain the universal standard, as the BIA equations need future validation and may not be suitable for low weight and possibly dehydrated eating disordered patients. These authors concluded that "despite ease and cost in both access and operation, the suitability of BIA in low bodyweight populations remains questionable and

that further research is needed to confirm not only the possibility of using BIA in patients with AN."

i. Ward, L. C. (2019). Bioelectrical impedance analysis for body composition assessment: reflections on accuracy, clinical utility, and standardisation. European journal of clinical nutrition, 73(2), 194-199.

ii. Popiołek, J., Teter, M., Kozak, G., Powrózek, T., Mlak, R., Karakuła Juchnowicz, H., & Małecka-Massalska, T. (2019). Anthropometrical and Bioelectrical Impedance Analysis Parameters in Anorexia Nervosa Patients' Nutritional Status Assessment. Medicina, 55(10), 671.

iii. Abbaspour, A., Reed, K. K., Hübel, C., Bulik-Sullivan, E. C., Tang, Q., Bulik, C. M., & Carroll, I. M. (2021). Comparison of Dual-Energy X-ray Absorptiometry and Bioelectrical Impedance Analysis in the Assessment of Body Composition in Women with Anorexia Nervosa upon Admission and Discharge from an Inpatient Specialist Unit. International journal of environmental research and public health, 18(21), 11388.

Kahm Clinic Response:

The expert's response to question 7b starts by citing a literature review (Ward, 2019). This review states nothing about Body Composition Analysis as it pertains to eating disorders or any relevance to our practice at The Kahm Clinic. Regardless, the article argues that even though it is possible to find some minor statistical differences relevant to research, these differences are clinically insignificant.

The article does discuss that BIA machines do rely on assumptions based on populations mean values, but they do not, as the expert claims, draw the conclusion that they are not

applicable to all patients. Rather, the conclusion is that one should be prudent and be mindful that it is not equally accurate for all subjects, but that it can be used within "clinically acceptable limits of accuracy." Indeed, "BIA technology is here to stay and its future is assured . . ."

We would like to include two paragraphs from the article summarizing the thrust of the whole article:

> All experimental methods are subject to errors including, technical errors of measurement, analytical errors and both systematic and random errors. In a careful analysis of fluid volume estimations in hemodialysis patients by BIA, direct isotopic measurements (TBK) and dilution methods, Raimann at al.[5] concluded: "Bioimpedance can be of great help in clinical medicine for the monitoring of body fluid volumes and nutritional markers such as muscle mass and intracellular volume. The errors in precision and accuracy are evident, but are of comparative magnitude to the errors found between the measurements of so-called 'gold standard' techniques."
>
> It could be argued that these small absolute differences between methods are clinically immaterial raising the issue of clinical relevance of a statistical difference. Researchers who overwhelmingly are those that develop prediction equations tend to focus on statistical significance whereas clinicals and clinical researchers may be more interest in what is considered "important" or "worthwhile in practice, i.e., clinically important differences.

This is remarkable. Direct isotopic measurements (TBK) and dilution methods are far more accurate than the DEXA scan (it is also incredibly expensive and only useable in a laboratory). In any case, in comparing the BIA with TBK in a very difficult patient population,

[5] Raimann JG, Zhu F, Wang J, Thijssen S, Kuhlmann MK, Kotanko P, Levin NW, Kaysen GA. Comparison of fluid volume estimates in chronic hemodialysis patients by bioimpedance, direct isotopic, and dilution methods. Kidney Int. 2014 Apr;85(4):898-908.

the authors conclude that yes BIA is a "great help" to track these nutritional markers. There are some errors, but that these are irrelevant in the clinical setting. The article as a whole is very positive on the use of body composition analysis. It highlights the magnitude of errors associated with impedance methods and points out that they are not so different from those recorded for the so-called gold standard methods. The thrust of the article is that BCA can be clinically useful as long as one is mindful of its limitations. We at the Kahm Clinic are very mindful of its limitations.

The expert, but not the article, argues that because BIA relies on assumptions based on populations mean values it cannot be applicable to all patients. But we would like to point out that a very large number of medical standards do precisely that. Some standards used in eating disorder treatment include BMI, pediatric height and weight. Good clinicians don't ignore height and weight charts because there are exceptions; rather, they use them with caution, as reference points, informing clinical decisions. We will continue this thread below.

The next study referenced in the expert's response is Popiotek et. al. This study states that BMI should be used as an indicator of malnutrition. We agree with this statement. BMI is an important factor in determining malnutrition; however, it is only one piece of the puzzle. As you continue reading the findings of the Popiotek et. al. study, the authors state, *"All of the applied BIA parameters turned out to be useful in the detection of malnutrition level."* It goes on to report that it is the first study looking into all of the parameters of BIA and all of the parameters proved useful in the detection of the state of starvation.

Of importance is that in using Body Composition Analysis, we will not be ignoring the other measures of malnutrition. We will be looking at BMI along with scale weight, growth charts, lab values, DEXA results, etc. in addition to the Metabolic Test and Body Composition

Analysis results. All of this together gives a more accurate picture of a patient's state of malnutrition and enables us to chart a better path forward for their recovery. The Popiotek study mentions that fluids play a role in the changes in BMI and since BMI does not include the weight of fluid change in a recovering AN patient, the markers of body composition would help determine this. Lastly, this study concludes that all of the BIA results are correlated to changes in BMI but that the *"BIA parameters are more adequate for nutritional status and treatment assessment in AN."* It continues by stating, *"all the considered BIA parameters are useful in the detection of the state of starvation."*

As we continue to address the issues put forth as they pertain to Body Composition Analysis, we would like to reiterate that Body Composition Analysis and Metabolic Testing are supplemental tools to address malnutrition. We do not aim to use these tests as replacements for the currently accepted standards of practice in eating disorder care. The study the expert references next, Abbaspour et al., 2021, discusses the importance of DEXA in the treatment of eating disorders. We agree. Ideally our patients would have a DEXA scan completed either during their treatment stay at a higher level of care before their step-down to our PHP/IOP, or we would refer them to UVM for DEXA. However, we know that DEXA can only be completed once, maybe twice, per year because it is an X-ray device which poses its own limitations on use. In an individual re-feeding from a restrictive eating disorder, their body composition is changing rapidly, and requires more frequent measurement than DEXA can provide. Abbaspour and Bulik conclude, contra the expert's position, with a statement that reads, *"body weight and BMI alone are not sufficient to comprehensively design and implement treatment in a clinical setting."*

Abbaspour et al., write: "When used with caution, BIA may provide relevant information about changes in body composition. However, its limitations as a cross-sectional measure in AN,

especially at a low bodyweight, should be considered." We fully agree and are well aware of its limitations! We are well aware that the data from BIA is not absolutely perfect in lower weight people. But even if it is not good enough for some research, it is still clinically useful to track the trends, e.g., to see lean dry mass increasing as well as phase angle improving. It may also indicate need for continued care, e.g. that weight/BMI restoration goals are met but lean dry mass has been decreasing over several measurements, prompting the clinician to explore meal plan execution or possible ongoing use of ED behaviors. The authors write: "data collected from the BIA equations provide body composition data that may aid in clinical assessment."(they cite Matter et al. 2011, which we will discuss below). Furthermore, not all people with eating disorders are low weight, and for those patients BIA is highly accurate. And the study was done in an inpatient setting so the participants were lower weight than we will have in an IOP/PHP, thus BIA will be more accurate for us than it was in the study.

Abbaspour et al. note that one of the limitations of their study is that they used a novel BIA device which goes from foot to foot and doesn't require the supine position or the electrodes. We use the standard hand to foot model, which is used in most clinical studies. The device used in the study has an "unknown proprietary equation," which may "substantially impart the agreement between DEXA and BIA measurements."

We fully agree with Abbaspour et al. that: "It will be important to develop a prediction model for the low bodyweight patient population that considers all aspects of the disease." What currently exists is imperfect, but it is much better than going without it and relying on scale weight! The article is very explicit that "Specific measurement of body composition in patients with AN provides information critical to both the provider and patient throughout the duration of illness. Bodyweight and BMI alone are not sufficient to comprehensively design treatment in a

clinical setting." The trend is clearly towards improving the BIA equations so that we can better treat this population. The reason all of this research is being done is precisely because scale weight and BMI are woefully insufficient in the treatment of eating disorders.

Since the expert argues that scale weight is sufficient, we would like to discuss Mattar et al., 2011,[6] cited in the previous "excellent article," to put it in the expert's words. Mattar et al., argue that, "In cases of severe malnutrition, body weight and/or BMI are not sensitive tools to determine the nutritional status. Trocki et al. showed that in adolescents with AN changes in BMI do not correlate well with changes in body composition. Loss of lean dry mass can be compensated by extracellular fluid accumulation and thus cannot be accurately sensed by body weight or BMI measurement. Thus it is valuable that the treating team assess the nutritional status of an AN patient with a simple, inexpensive and clinically available method such as the BIA."

Mattar et al., concludes with the following reasonable suggestion which we will try to follow: "The evaluation of body composition in AN improves the management and personalization of treatment. A practical approach would be to use at the start of treatment BIA and DXA because DXA assesses also the bone mineral density and then at follow-up visits, BIA can be used for body composition assessment."

In The Kahm Clinic PHP/IOP we plan to use all tools available to us to best treat our patients. This is included but not limited to, body weight, BMI, DEXA, Metabolic Testing, Body Composition Analysis, lab values, growth charts, past medical history, etc. We do not aim to

[6] Lama Mattar, Nathalie Godart, Jean Claude Melchior, Bruno Falissard, Sami Kolta, Damien Ringuenet, Christine Vindreau, Clementine Nordon, Corinne Blanchet, Claude Pichard, Underweight patients with anorexia nervosa: Comparison of bioelectrical impedance analysis using five equations to dual X-ray absorptiometry,Clinical Nutrition, Volume 30, Issue 6, 2011, Pages 746-752; Trocki O., Theodoros M.T., Shepherd R.W. Lack of sensitivity of weight targets compared with body cell mass for determining recovery from malnutrition in adolescents with anorexia nervosa. *Int J Eat Disord.* 1998; 23: 169-176

purport that Body Composition Analysis is better than DEXA or that we would use it instead of DEXA. Our reason for using BIA is because it is usable on a more frequent basis and is helpful for following trends for an individual throughout their recovery instead of one test, measured once per year.

Professional Opinion

c. My review of the literature provided in this application and of the literature on this topic does not identify empirical studies that supports the use of these devices in any level of care. I have contacted a number of the most respected eating disorder programs (ERC, the Emily Program, Alsana, and Veritas Collaborative) in the country to find out if these programs use these devices in their PHP and IOP programs. They are not being used. One comment: "this practice does not align with evidence or best-practices at this time. These device do not add any new information or clarity to a well-trained RD's assessment ability." Another comment: "There are no IOP, PHP, Res, or IP - that I am aware of that utilized these tests regularly in treatment. It is not included in any way in the REDC centers of excellence white paper" (Residential Eating Disorder Centers of excellence white paper, 2021)."

Kahm Clinic Response:

As we addressed in the first part of this response, after reading the studies cited in the expert's initial response it is clear that there is quite a bit of empirical data in support of Metabolic Testing and Body Composition Analysis even if there is not a peer reviewed clinical study available for the exact use case. Each of the studies referenced concluded that both tests are a useful tool in the treatment of a patient and can only help in patient care. They also

concluded that scale weight and BMI alone should not be the only data points used in determining malnutrition, therefore further supporting the use of more anthropometric data to diagnose malnutrition. The Metabolic Test and Body Composition Analysis are not used in most other treatment settings at this time; however, their data is always requested. Over the past 6 years, The Kahm Clinic in Burlington has worked closely with each of the programs the expert mentioned. Every time we collaborate care with one of these facilities, the facilities are eager to know the results of a patient's Metabolic Test and Body Composition Analysis as they find the data extremely helpful in the care of the patient transitioning to their facility for higher level of care.

It is untrue that no one else does this. The Upstate New York Eating Disorder Service use Metabolic Testing and Body Composition Analysis in the treatment of eating disorders in IOP, PHP, and residential and outpatient settings. They have locations in Elmira, Liverpool, Ithaca, Vestal and Syracuse. They have done what we are proposing to do for over 25 years. Their founder Carolyn Hodges Chaffee and psychiatrist Sophia Bezirganian have included letters of support below.

GMCB Request

8. An opinion as to whether the use of the devices is inconsistent with or contrary to evidence-based practice in the treatment of eating disorders within a PHP or IOP.

Professional Opinion

These medical machines are not necessary to curing malnutrition in the treatment of eating disorders. They are not recommended by the Academy of Eating Disorders or the American

Dietetic Association (now the Academy of Nutrition and Dietetics) or by Joint Commission Requirements for Residential and Outpatient Eating Disorders Programs. References below:

Kahm Clinic Response:

Everything said in response to question #7 answers that it is not inconsistent with or contrary to evidence-based practice. Because these bodies are silent on Metabolic Testing or Body Composition Analysis does not mean they are inconsistent or contrary to them in any way. And the expert's standard "necessary to curing malnutrition" and recommended by AED or ADA should be disregarded as inconsistent with the definition of medical necessity in Vermont's regulations that require insurers to provide access to and consumers to have access to a far broader scope of care than what is "necessary to curing" or recommended by certain authorities to include restorative and maintenance care; care that prevents deterioration or palliates and care that prevents likely onset of or detects incipient health problems. Surely providers should be authorized to deliver care that is mandatory for insurers to cover and provide access to for subscribers.

GMCB Request

9. The pros and cons, including the potential harm, if any, of using these devices in these programs.

Professional Opinion

a**.** Eating disordered patients are already, by definition, anxious about gaining weight. As there are no studies on the effect of having metabolic and body composition being regularly

measured in this population, it is reasonable to assume that the test itself will increase anxiety and worry about how metabolism and percentage of fat and muscle are changing due to treatment. Will the patient develop a dependence on having regular metabolic and body composition tests?

Kahm Clinic Response

We discuss the REE every 4-6 weeks as we retest patients to see if they are hypometabolic. We do discuss trends from the Body Composition Analysis, but we never discuss body fat percentage. We do want to emphasize that after we have weighed patients blind and run the body composition analysis we do not jump right into the trends from the test. First, we discuss how their eating has been going since the last discussion and then we discuss a host of other variables, e.g., their activity level, energy, hunger, cravings, GI distress/gut functions, quality of sleep, menstruation, etc. It is only after covering such topics that we discuss whether the trends from the body composition analysis indicate ongoing recovery or need for changes to plan of care. Can that be difficult for the patients? Yes, but it is necessary. No one likes to hear that they are regressing, if they are. As we previously mentioned, in all eating disorder treatment there will be parts of the treatment that cause anxiety. For instance, weight gain is a necessary part of recovery, and even though it causes anxiety that does not make it any less necessary.

A patient may research and become anxious about their DEXA scan results, or other lab values. In any treatment facility there are going to be instances where a patient's eating disorder is triggered. When that happens it is the clinician's job to help the patient process it. This is a necessary part of recovery.

If the expert's argument is that sharing numbers causes anxiety, we cannot see how this is any different than the expert's advocating for the practice of openly weighing her patients and sharing that number with them. In fact, we think weight is far more anxiety producing than body composition analysis trends, for as she writes "Eating disordered patients are already, by definition, anxious about gaining weight." The body composition allows clinicians to discuss recovery status outside just weight; we are able to congratulate their adherence to recovery recommendations as it is helping them restore healthy muscle mass that was lost due to their ED behaviors. They are usually thrilled to hear it and encouraged to keep going.

The discussions of BIA trends with the patient are meant to enhance their own cognitive connection between nutrition and physiological health; we are not teaching them to rely on the data, we are using the data to help them understand how their eating affects their own bodies. The point is to get to full recovery where they can eat intuitively without considering these numbers or their weight.

The expert's worrying about dependency seems very nebulous to us and we are not sure what she means. We have many patients who find the testing extremely useful and wish it were more widely available. We cannot and should not be asked to address claims concerning the anonymous patients, of course, but we and the supporters find the treatment effective. Of course, it is not for everyone: it is expected that a treatment will not work for everyone – we routinely take patients for whom other treatments have not been effective.

Professional Opinion

b. If metabolic testing and body composition devices were validated and evidence based, their use would be most appropriate for inpatient treatment when meals are prepared by staff overseen

by a dietitian with precise amounts of various nutrients and calories rather than in an PHP and IOP where one to two meals a day are prepared and consumed off-site. The clinical examples provided in the Kahm application seem to imply that nutrition and calorie needs are very precise. Patients participating in an IOP and PHP will be living at home and neither they nor their families will be or should be counting or measuring macronutrients or calories in such an exact way to meet the goals dictated by devices.

Kahm Clinic Response

The response to 9b misinterprets the use of Metabolic Testing and Body Composition Analysis as it is used at The Kahm Clinic. As we have stated before in answers to GMCB questions, the testing results are for clinician use in order to determine best practice for the patient. The nutrition and calorie needs given to the patient are not precise. In fact, the patient is not given ANY specific numbers as it pertains to calories or macronutrients, nor would their parents be given any recommendations to count, measure or track macronutrients. The meal plan provided to the patient and/or their family is a general meal plan either using an exchange system (as commonly used in treatment programs across the country), a plate method, or an intuitive eating plan depending on where the client is in their stage of recovery. This meal plan is always adjusted based on patient compliance, socioeconomic status, familial relations, time available for meal prep, etc. In fact, the results of the Metabolic Test and Body Composition Analysis make it so that we have even more flexibility with meal plans. Since we will be able to track the level of malnutrition in a more specific way, instead of just using scale weight and BMI, we have the ability to promote intuitive eating, schedule flexibility and more lenient meal plans that

are most appropriate for that patient's unique situation. The conclusions drawn from this inaccurate perception are not relevant.

Professional Opinion

c. Standard evidenced-based treatment does not rely on Metabolic Testing or Body Composition Analysis. These measures are not necessary and may not be accurate. A well trained dietitian can adjust a patient's food plan based on weight changes on a simple scale to achieve the same results. Patients in IOP and PHP programs usually discharge to home treatment teams: a primary care provider, therapist, and dietitian. No providers outside of the Kahm Clinic use these devices. Therefore, the use of these devices is likely to make the transition to a home treatment team more difficult for patients who have become accustomed to being tested by these devices. The patients will have observed their treatment and food plan are adjusted based on the results of the testing.

Kahm Clinic Response:

In order to best reply to 9c, we encourage you again to read, in their entirety, the research studies that have been cited throughout the expert's answers if you have not done so already. Each of these studies repeatedly state how important it is to have more information about a patient's malnutrition status and that weight changes on a simple scale are NOT adequate. The purpose of the Metabolic Testing and Body Composition Analysis are to get a patient to a stage in recovery where they are stable and better off than if their recovery was simply tracked through a scale weight. As a result, we find that this makes it easier for a home treatment team to manage a patient since they are more medically and nutritionally stable. Yet again, since the

patient is not given specific numbers from the testing or their meal plan, their transition to a home team will be seamless. To date, we have never experienced an issue with sharing clients between facilities or home treatment teams that do not use the Metabolic Test or Body Composition Analysis.

Professional Opinion

d. Although I was not asked to comment on the Kahm application response to Q5 and Q6 (20220216_ResptoQ002.pdf (vermont.gov)) which clearly states that the PHP and IOP programming for adolescents will include FBT, I did. (See my full comments and references on page 14-15 of my review of the Kham Clinic's CON application.) The reliance of medical devices by a dietitian for determining calorie levels and components of meals runs counter to the basic premises of Family-Based Treatment for anorexia and bulimia (FBT). FBT's unique approach is that it empowers parents and other caregivers to take charge of their child's food intake. Another key tenet of FBT is that the clinician takes a nonauthoritarian therapeutic stance but active role in guiding the family through the recovery process, but does not tell the family exactly how to feed their child. Rather, the clinician collaborates with the family by helping them figure out for themselves the best way to refeed their child.

Kahm Clinic Response

Our answer to 9b also serves to answer 9d. This argument is also irrelevant since it is based on inaccurate assumptions. As we stated in the response to 9b, the nutrition and calorie needs given to the patient or parent are not precise. In fact, the patient is not given ANY specific numbers as it pertains to calories or macronutrients, nor would their parents be given any recommendations

to count, measure or track macronutrients. Once the meal plan is determined, what will be given to the parent is the general "skeleton" of how to best implement this at home. An example of meal plan goals that would be given to a family includes:

- Meal plan of 3 meals and 2 snacks per day
- Meals should be prepared by the parent and served to the child to eliminate any ED behaviors such as manipulating the amount of fat the food is cooked in, etc.
- Goal to have a protein source at every meal and snack, that protein source can be chosen by the parent
- Patient will try 1 challenge food per week (i.e. a dessert, meal eaten out, etc.)

As you can see, none of this is "authoritarian" or controlling in any way but gives some guidelines to help the parents feed their children at home. We will then evaluate the status of the patient continually using the Metabolic Test and Body Composition Analysis and see if these nutrition goals need to be adjusted in any way. As we stated in answer 9b, it seems as though the expert is unclear of how our meal planning is done.

Professional Opinion

e. In conclusion, I believe these machines are unnecessary to curing malnutrition in eating disorder patients and may cause dependence on machines that are not available in any other treatment milieu. Further use of these machines in PHPs and IOPs that employ FBT techniques is at odds with the basic tenets of FBT.

Kahm Clinic Response and Conclusion

We wish to conclude here by briefly focusing on the expert's "non-negotiable" advocating for open weighing in FBT because we think there are a few important points to tease from it. The expert herself noted that scale weight for the eating disorder population is very scary and triggering. Indeed, Froreich et al., 2020, the most recent study on the question of open weighing, write: "the majority of participants identified open weighing as a barrier to recovery, particularly throughout weight restoration, when seeing the number on the scale was thought to have negative effects on motivation, anxiety levels, urges to engage in compensatory behaviours, and treatment responsivity."[7] The point we wish to make here is that if numbers are triggering, dependence and obsession causing, then surely the ultimate number which would cause these is weight which the expert advocates openly sharing with the patients. And if sharing weight in a clinically appropriate manner is compatible with FBT then surely sharing Body Composition Analysis trends (not the actual numbers) must be as well.

Furthermore, the expert's arguments imply that the only course of practice allowed is what is included in the standards as well as what has been through RCTs in peer reviewed journals.[8] But as we noted in the introduction, open weighing is neither advocated by the relevant standards nor does it meet the evidence-based bar of RCTs or even lower bars of acceptable peer reviewed research.[9] Just as the expert advocates for a practice in which there are not RCTs supporting it, so do we.

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[7] See note 7.

[8] The expert criticizes us for not having a weighing protocol according to standards and research. However, she cites an article that discussed the fact that there is no standardized way of weighing, there are no evidence based guidelines and there is no good research on the topic! Kelly-Weeder, S., Kells, M., Jennings, K., Dunne, J., & Wolfe, B. (2018). Procedures and Protocols for Weight Assessment During Acute Illness in Individuals With Anorexia Nervosa: A National Survey. *Journal of the American Psychiatric Nurses Association*, *24*(3), 241–246. We do have a written policy and make sure to do it in the exact same way every time, but it was not included because we did not think it necessary to share every clinical detail with the Green Mountain Care Board.

[9] See footnote 1.

We do not believe that RCTs are the bar that should or could be met here (see the discussion of CON Standard 1.2 in the intro. above). We would like to point out that the research in eating disorders is woefully underfunded and very disproportionate to the number of people suffering from it.[10] It is impossible to offer eating disorder treatment that only follows practice guidelines established by RCTs. For instance, some providers refuse to weigh patients, some weigh them blindly, and others weigh them openly. Are there RCTs comparing these different practices? No. If everything that a Vermont eating disorder IOP/PHP did needed to pass the bar of a RCT there could never be an IOP/PHP for eating disorder treatment in Vermont. No matter what, some percentage of the practice will not count as evidence based if the bar is set at RCTs.

We also wish to make the point that it is a good thing that there are disagreements in the field, (although we do wish they were a bit more amicable and less acrimonious!). We ourselves have not made up our mind on what we think about open weighing. There are good plausible arguments on both sides.[11] We sincerely think that open weighing is an interesting practice which may prove to be valuable. Because there is a great debate on blind vs. open weighing

[10] "A recent funding report by the US National Institute of Mental Health revealed that, across all psychiatric conditions, funding for eating disorder research was the most discrepant from the burden of illness they represent1. In 2015, the volume of federal support for eating disorder research equated to approximately US$0.73 per affected individual. In contrast, autism research was supported at a rate of US$58.65 per affected individual, and schizophrenia research at a rate of US$86.97 per affected individual." Murray, S. B., Pila, E., Griffiths, S., & Le Grange, D. (2017). When illness severity and research dollars do not align: are we overlooking eating disorders?. *World psychiatry : official journal of the World Psychiatric Association (WPA)*, *16*(3), 321. https://doi.org/10.1002/wps.20465 See here for updated numbers: https://report.nih.gov/funding/categorical-spending#/

[11] Here is a summary of the disagreeing positions. There is obviously a tremendous value to someone not being fearful and terribly anxious about the numbers on the scale – it's almost impossible to hide from them forever. Surely full recovery demands being able to step on a scale without fear and anxiety. And it does not seem implausible that patients would experience a lessening of weight-related anxiety as they are more and more exposed to their weight. And maybe blind weighing represents a safety behavior to avoid fears which need to be confronted. On the other hand, perhaps blind weighing provides an opportunity to modify a person's distorted desire to constantly need to know and control one's weight. Perhaps what is most necessary is letting go of control and perhaps blind weighing allows patients to have a greater tolerance of weight uncertainty, which in the long run is also a very important goal.

researchers are beginning to do comparative effectiveness studies on this topic. This is excellent! Hopefully we will discover which is the best, blind or open weighing. We are hopeful that new and better guidance will come in the next 10 years and we will follow it as it come to be. But the fact that there are differences of opinion and practice is what ultimately drives the field forward and improves eating disorder treatment. If everyone always had the same opinion as everyone else and did exactly what everyone else did there would never be any progress. Eating disorder treatment as a whole does not have a great track record, relapse rates are far too high, and progress is always dearly welcome. We look forward to reading the research in the years to come and strongly encourage you all to read the article on open weighing.

Here are the main points we wish to emphasize from this discussion of blind vs. open weighing. (1) The expert both advocates for a practice which is not evidence based or promulgated by the standards and simultaneously argues that we can do no such thing. (2) If open weighing is allowed, surely sharing trends from Body Composition Analysis must be as well. It does not make sense to argue against our sharing data because it may cause anxiety, while simultaneously advocating sharing data that is far more anxiety producing. (3) Granting the dearth of quality eating disorder research, clinical practice cannot possibly exist if its scope of practice is limited by ground covered by solid research. (4) Disagreements in this field (and any) are ultimately good and drive much needed progress in research and clinical practice.

Clearly, we have a strong difference of opinion with the expert on the value of metabolic testing and body composition analysis in the field of eating disorder treatment, but there must be room for such differing opinions in our field. And we would like to reiterate, that for a patient, the Body Comp takes five minutes twice a week and the Metabolic Test takes twenty minutes every 4-6 weeks. It is a tiny part of their whole treatment. The rest of the time they are in

classical IOP/PHP programming just like the other established programs across the country. The testing is meant to supplement the traditional anthropomorphic assessment for use within the structure of a traditional recovery model, as opposed to supplanting it. Our aim is to provide a standard of care that matches or exceeds any other PHP/IOP program in our country. Vermont desperately needs this treatment, and it would be a shame to throw out the whole because of this small part. It would be a shame to throw out the opportunity for expanded eating disorder care in our state because of an overemphasis on a singular difference in our assessment approach.

May 22, 2022

Green Mountain Care Board
89 Main Street, Third Floor
City Center
Montpelier, Vermont 05620

Dear Members of the Green Mountain Care Board,

I write to you in regard to the discussion about the use of metabolic testing and body composition equipment; if they could be included or should be excluded for evaluation and treatment of eating disorders. Specifically should these instruments be included within the Vermont mental health standards for eating disorder treatment. If so, are they valid? How could they aid in evaluating the status and changes in patient body mass as a part of data collection in order to make informed clinical recommendations for treatment? The information I offer sketches the larger contextual picture for you to use in your consideration for treatment guidelines.

First, I should introduce myself. I am a clinical psychologist who has treated eating disorders since 1979. After working in the field for ten years, I returned to graduate school in the early 1980's to get my doctorate degree, because I was seeing an increase in eating disorder cases and had no knowledge on how to treat this illness. I researched and completed a two part doctoral dissertation on eating disorders. This was just a few years after eating disorders became a new diagnosis in the American Psychiatric Association's (APA) Diagnostic and Statistical Manual, 1980, (DSM-III).[1] Eating disorder research and treatment standards have understandably evolved since 1980 as science and technology have developed better forms of measurement and influenced the refinement of treatment methods. I have spent my career continuing to research and treat this illness with colleagues across the country and globe, in order to establish a better understanding of eating disorders for the purpose to improve treatment outcomes.

As a part of that journey, I became the Director of the National Eating Disorder Organization (NEDO), in 1990 -1994, now the National Eating Disorder Association. NEDO hosted the first national eating disorder conferences in the US, bringing international researchers together to inform clinicians on what the data were saying about assessments and treatment approaches. I was also one of the original fifteen professionals who sat around the table in Tulsa, Oklahoma to develop the Academy for Eating Disorders, the professional organization that is quoted by both parties in this discussion for having set eating disorder guidelines and standards. It is an international professional organization of over a 1,000 members consisting of researchers, clinicians, educators, dietitians, and medical professionals.

Second, I want to commend Green Mountain Care Board for upholding high standards by requiring researched evidence and open discussion to help determine the best evidence-based guidelines for eating disorder treatment in the state. This protects patients and their families from needless error and can reduce clinical incompetency. The best eating disorder treatment approaches integrate evidence based therapies and interventions using reliable tools and equipment to inform and guide decisions. A side point is that a key positive aspect of science is that it identifies errors and outcomes of the treatments and instruments studied. A negative and cautious thing about science is that when new evidence emerges on new interventions or instruments, it takes a lot of time, with repeated trials to

clarify reliability in the findings. And then more time for professionals to learn how to apply the instruments and treatment approaches to integrate them into the larger therapeutic picture.

Third, a little background in the evolution of our understanding of eating disorders may be of help for the Care Board, in order to place this information into a treatment guideline context.

Eating disorders are one of the most misunderstood and yet deadly of all mental disorders.[2,3,4,5] The diagnostic name, "Eating Disorders" reflects the little that was known when initially described in the DSM-III. A problem with the diagnostic name is that eating is a requirement of life, not a disorder. Everyone eats and everyone does not have an eating disorder. The diagnostic name set the stage for people to either downplay an everyday requirement of life or distance themselves from the poorly understood illness. Treatments then and now focus primarily on symptoms, which are outward problematic expressions of thoughts, feelings, and behaviors. They use measurements such as weight and body mass index (BMI), a simple calculation of weight in ratio to height, to determine the percent of body fat. What has been missing in treatment? An understanding of the underlying biological causes of the illness. This includes the genetic, neurobiological, and biological bases of the illness.

It needs to be said that scientists are quite similar to everyday people seeking answers. We want simpler ways of combing through the complex nature of the brain and body, and yet we also require accuracy. A fundamental past and present problem is the instrument used to evaluate weight when treating eating disorders, the scale. How it is used and interpreted is a problem in eating disorder treatment. Weight has been the fundamental method of evaluating a person's body mass change. Get on the scale and see the number. Body mass index (BMI) became the professional and research calculation, and then layperson approach, to determine overall body fat mass. One statistical calculation provides an average, and yet vague understanding of body mass. For example, schools began to use BMI to determine if obesity was rising among students in the country. Simple, easy to calculate, and yet misinterpreted, over interpreted and often erroneously applied.

BMI and weight are the primary and sometimes the sole method of determining body mass changes. They are both used erroneously in treatment due to the magnitude given to their results to inform treatment. The fact is that weight and BMI are not capable of providing answers to many treatment questions. There can be error in the scale that measures weight, if inexpensive and every day scales are used. Error can occur in calculation of BMI. But even more so, error typically occurs in *how* weight and BMI are used to inform assessment and treatment. One of the most common places erroneous interpretations of weight occurs is in the doctor's office. One goes into a physician's office, is weighed with clothes on, at all times of the day and night, followed by no acknowledgement of clothing and shoes worn, or questions about how much liquid and food intake occurred in that day, or status of bowel movements, amount of sleep the previous night, or if female, menses cycle status. All of these factors influence weight by 1-5 lbs. Yet the number is recorded with the assumption that it is accurate, because the scale is calibrated. This simple number is filled with misinterpretation. But it is what has been used for decades by hospitals, clinics, and schools. It requires no additional cost in funding, staffing, and training, nor additional time. However, it does hold a cost for the patients' health status. A problem with BMI is that the more muscle a person has, the higher the BMI. Many athletes appear to be highly obese from the BMI number, when in fact they have a high proportion of muscle mass. Often they have very little fat. This is true for wrestlers, football and soccer players, gymnasts, whether male through female. BMI is not capable of providing the information of body

mass that providers need. So how does a professional discern what is fat, or muscle or water weight in order to inform eating disorder treatment?

It was not until after the genome was sequenced in 2000, and technology advanced in its refinement of equipment during the early 2000's that researchers could begin to look inside the brain and body in reliable 3-D functional ways. For example, functional magnetic resonance imaging (fMRI) were refined to reliably identify what neuropathways over or under fired and could identify differences in how circuits fired in different illnesses. Dr. Walter Kaye, MD, at UCSD, led this research globally for anorexia nervosa. His groundbreaking article in 2009[6] identified brain circuits that fire significantly differently between those who had eating disorders and those who did not, indicating that there is much more going on in brain response than ever imagined.[7] In addition, new technologies began to emerge that looked into body composition, proportions of muscle, water, and fat mass that helped us know, from the inside, what was contributing to weight changes. This helped clinical teams with biologically based data to inform treatment. But like all technology, the quality of the instrument and the training of the person using it, and the interpretation given to the data are important. For example, the heart is a muscle. Less muscle mass raises a red flag for a greater concern that the patient is vulnerable to heart failure. This is one of the most common causes of death among those with anorexia nervosa.[8,9] It was not until Cindy Bulik led global GWAS (genome wide associated studies) in eating disorders that we realized the significant genetic influence causing vulnerability to eating disorders and other mental health disorders.

Through these advancements in technology and research findings, the Academy for Eating Disorders recognized that eating disorders are biologically based in 2009.[10] For over two decades now we know that the very foundation and underpinnings of eating disorders are biological, with the environment influencing and shaping the neurobiological and physical factors. Meanwhile, the layperson and community population have continued to distance themselves from being associated with eating disorders, still due to name confusion. Mental health clinicians began to increasingly distance themselves from genetic, neurobiologically and biologically based research due to lack of biologically based training. Current evidence based treatments continue to be grounded in symptom based approaches that were set in motion in 1980. They primarily focus on feelings and behaviors, even after evidence has become more reliable that instruments can show what is going on within the body and brain. This has become a growing problem in the mental health treatment world. We are at a turning point in the field of psychology.

In 2013 the current DSM-5 was released by APA. A debate occurred within its committees regarding whether to use neurobiological and biological research data to inform refinement of diagnoses and treatments. In spite of a growing body of research, the conclusion was to keep the neurobiological and biological data out of the diagnostic manual. The director of the National Institutes for Mental Health, Thomas Insel, MD, was so angered by this that he announced the week prior to the DSM-5 being released that NIMH did not endorse the DSM-5 due to its lack in inclusion of critical neurobiological research findings. The politics were intense. The end result was that NIMH agreed that the DSM-5 would be released as is, but NIMH, the central mental health research institution in the US, would not fund any grants that did not include neurobiological questions. It forced research centers and universities to broaden and deepen their foci overnight. As a result, there has been a significant amount of research conducted that addresses the underlying contributions and biological factors in eating disorders. Yet, like DSM, clinicians have been slow to apply and integrate these fundamental findings into treatment approaches.

Currently there is a growing gap in professional understanding of eating disorders that perpetuates the use of past theories, instruments, and therapies, which are predominantly symptom based, weight-based and even body mass index (BMI) based. The mental health world has remained flat, focusing on the outside picture, when in fact the illness is 3-D, rounded with a complex interior of details that inform diagnoses and treatment. The last 20 years of research has continued to refine what is happening inside of the brain and body of those with eating disorders, while also researching new treatments and instruments to inform therapies.[11]

This raises the question; how much time needs to pass before guidelines are revised to include new instruments and innovative treatment approaches? Therapies are needed that incorporate biologically based information to evaluate what is happening inside the body in order to determine what to do on the outside for treatment interventions. These therapies can augment traditional evidenced based therapies. In April of this year, 2022, I co-authored a new book that integrates neurobiologically and biologically based research eating disorder findings into a novel treatment. It is called, Temperament Based Therapy with Support (TBT-S). Chapter 20 is dedicated to help clinicians better understand the importance of using more refined instruments, such as body composition scales, in order to assess and inform high quality and evidence based treatment. These instruments have a greater capacity to augment and enhance the biological details needed to inform treatment.

Allowing body composition analysis does not lower Vermont mental health standards, it broadens them and provides needed biological information to enhance assessment. It brings emerging evidence to the fore and rounds out standards for the future. However, as shown through the erroneous ways weight and BMI are used, guidelines should insist on reliability and validity of instruments used, and assurance of calibration. They should also require that adequate training and parameters for interpretation of the instruments to assure accuracy in measurement and interpretation that informs treatment. For example, if the Care Board chooses to allow body composition scales/instruments, it might also include guidelines that instruments used have a high standard of accuracy, reliability and validity that draw from the same client base from which their data are normed.

For example, I founded and directed a specialized eating disorder nonprofit clinic in 2001 that provided research, education, and treatment, ranging from outpatient through partial hospital levels of care. Initially we used scales and BMI as our fundamental source of information to inform our understanding of patient body mass change. These instruments were the only resources available. We continued to follow the research, and around 2016 we purchased a high-quality body composition scale. We did this because we had been following the neurobiological, biological, and genetic research of eating disorders, had partnered with the University of California, San Diego, and were developing a new treatment approach that integrated the neurobiological findings into care. We were testing it with adolescent and adult patients and their primary support persons. We acquired a $12,000 body composition scale, a model that was well tested and validated. We required all dietitians and identified clinicians to be fully trained by the technicians from the manufacturer to assure accuracy in instrument use and data interpretations. The body composition scale provided a wealth of information on the patients' body compositions. We could see percent and placement of fat, muscle and water in body and interstitial tissue. We could compare this with former readings to see if and how body composition was changing. We could see if the client had cellular health or breakdown. All this was used to help inform dietary, clinical, and medical monitoring. If muscle was decreasing, we had the client medically monitored for heart and other health concerns. Knowing what was going on

internally offered us a plethora of options to inform what to do on the outside to reshape behaviors and cognitions. This is no different from using a CT scan to identify if a person has a stroke or infarction and using the data to assess and inform treatment.

Ironically, I have talked with university research and for-profit multisite eating disorder treatment programs about considering body composition scales in their treatment and research protocol. Not one site addressed concern for equipment validity. All sites, nonprofit or profit, stated the price was the factor in not using the equipment. Is this a valid reason to prevent treatment questions from being more informed?

So, do we keep biologically based instruments out of mental health treatment that assess what is below the body's surface because of price or fear that they could be misused and interpreted incorrectly? That is already happening with weight and BMI. Or could the Care Board consider guidelines to include such instruments and hold its standards high to reduce error? If the Care Board chooses to lean toward the latter, I offer the following recommendations to include in its guidelines

- That body composition and metabolic devices are of the quality that meet researched criteria for reliability and validity standards, normed on relevant populations.
- That body composition and metabolic instruments are not the sole methods used in establishing diagnostic evaluations and treatment recommendations.
- That those who use the instruments are trained to reliably interpret the findings within the cautions of normative and standard error conclusions.

In conclusion, including body composition and metabolic instruments raises and rounds out the bar by including the last 20 years of research findings and allowing professionals to carry forward needed information about the neurobiological and biological functioning of patients with eating disorders. The Green Mountain Care Board could incorporate the National Institute of Mental Health approach by expanding standard guidelines that reflects current research and future directions while assuring accuracy in care.

Thank you for your time and consideration on this matter.

Laura Hill PhD.

Laura Hill PhD,
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THE
University of Vermont
Children's Hospital

June 3, 2022

Green Mountain Care Board

89 Main Street, Third Floor City Center

Montpelier, Vermont 05620

To Whom It May Concern,

It is our pleasure to write a letter in support of the Kahm Clinic application to establish an Intensive Outpatient and Partial Hospitalization Program for eating disorder care in Chittenden County. As the medical director and the lead psychologist of the University of Vermont Children's Hospital Adolescent Medicine Eating Disorder Consult Clinic we feel uniquely qualified to speak to the need for additional services in the state of VT that can help address the acutely worsening prevalence and severity of disordered eating among VT residents.

As the Green Mountain Care Board is already aware, we have a severe mental health crisis in the state of Vermont at this time. We do not have adequate community based services, residential or hospital programs to serve young people with moderate to severe mental illness let alone care for patients who have the associated medical complications that can accompany severely disordered eating. Eating disorders are complex neurobiological illnesses that are highly influenced by genetics and environment, and have the highest morbidity and mortality of any other psychiatric illness. Treatment requires specialized multidisciplinary care that includes medical monitoring not available in a general psychiatric milieu. Early intervention and treatment is essential for improved outcomes; at this time the lack of adequate services and the long wait for adequate services in Vermont are contributing to poorer outcomes for Vermonters with eating disorders

As clearly described in the Kahm Clinic application there are several levels of eating disorder care as outlined by the American Psychiatric Association that might be needed by a patient/family depending on severity of illness.

Level 1. Outpatient Multidisciplinary Community Based Care

Level 2. Intensive Outpatient Programs (IOP)

Level 3. Partial Hospitalization Programs (PHP)

Level 4. Residential Treatment Programs

Level 5. Inpatient Hospital Medical Stabilization

Adolescents and adults in Vermont that need eating disorder care are primarily relying on community based multidisciplinary teams consisting of primary care providers and registered dietitians, individual therapists, family therapists, and care coordinators from all different organizations/clinics. There are a select few individuals and organizations that provide true outpatient specialty care in this area but their waitlists are very long at this time. We have no eating disorder specific IOP, PHP or Residential programs in Vermont to serve adolescents or adults. While some general psychiatric IOP and Residential programs exist in-state, none of them have eating disorder expertise nor do they provide any medical and nutrition monitoring as part of their programs. UVMCH and DHMC do have very short term inpatient hospital medical stabilization available for patients that are severely ill but patients are quickly discharged home post stabilization to await admission to out of state residential treatment centers. Waits for these programs during the pandemic have expanded from days to months; this often leaves patients/families and care providers struggling with inadequate supports at home for extended periods of time while awaiting more appropriate higher level of care. Unfortunately many of these patients require re-admission for inpatient medical stabilization and/or multiple

emergency room visits to remain stable until admission to residential treatment occurs. These experiences require significant resources from systems not equipped to manage the needs of eating disorder care and can be traumatic for patients and families.

The availability of a Vermont-based IOP/PHP will fill an important gap in the continuum of care for Vermonters with moderate to severe eating disorders and will allow for more patients to get better faster within the setting of their own community and in the supportive environments of their own homes. In addition a quality IOP/PHP program may even prevent the need for residential or inpatient treatment, consistent with population health models of prevention of worsening disease for the greater good of the community. These services will also allow for the more appropriate gold standard of stepdown care from residential treatment before returning to community based care.

In addition, earlier and more intensive supports will lower the risk for severe and longer lasting illness due to insufficient treatment. It will also allow us to strengthen our care for patients appropriate to the outpatient multidisciplinary community based care setting. We feel certain that availability of these services will prevent costly morbidity and need for expensive out-of-state IOP, PHP, Residential and Inpatient Eating Disorder specific care.

In closing we appreciate that the Kahm Clinic will be applying standard evaluation and treatment methods and routine review of care and progress as used in most existing IOP/PHPs with the addition of their unique metabolic testing approaching. We applaud their plan to seek CEDS and CEDRD training and Joint Commission Behavioral Healthcare Standards accreditation.

Sincerely,

Erica Gibson, MD

Division Chief, Adolescent Medicine

University of Vermont Children's Hospital

Aubrey Carpenter, PhD

Staff Psychologist, Adolescent Medicine Eating Disorder Consult Clinic

University of Vermont Medical Center.

June 3, 2022

Green Mountain Care Board

89 Main Street, Third Floor, City Center

Montpelier, Vermont 05620

Dear GMCB members:

I am both a physician and parent in Vermont and believe it is a moral obligation for the state of Vermont's health care leaders to address the gaping lack of eating disorder resources. For eight years I served as the physician on the UVM Help Overcoming Problem Eating (HOPE) team. In this role, I became familiar and referred to programs all over the country meeting the needs of our UVM students in their home states. The Vermont students had no local options and had to go out of state. At that time we had programs such as Vermont Center for Integrative Medicine attempt to create an eating disorder IOP or PHP unsuccessfully due to substantial barriers. In 2015, I transitioned from staff at UVM Center for Health and Wellbeing (CHWB) to UVMMC Family Medicine South Burlington and a faculty role at the Larner College of Medicine. I have continued caring for young adults and adolescents with eating disorders and provide consults as part of my practice. I receive referrals from Dr Gibson, at the UVMMC Adolescent Eating Disorder Clinic and community providers such as the Adams Center. Due to their long wait list the UVMMC adolescent clinic only accept younger adolescents. Frequently my role as a physician with expertise in this area will be to confirm the need for higher level of care such as PHP or residential treatment. Again and again we come up against the same barrier that there just are no options. For many reasons, financial as well as emotional, going out of state is impossible. PHP and IOP do not provide housing usually and, if they do it is not covered by insurance. Often, the client is ambivalent to pursue needed treatment and the idea of traveling out of state pushes it beyond their ability. Evidence shows us that successful eating disorder treatment involves family based approach to care and travelling out of state reduces this critical piece to a video screen at best. UVMMC does have a Partial Hospital Program (PHP) program, as you know, called Seneca. If you have an eating disorder you are automatically disqualified from attending. Vermont based eating disorder treatment is critical and urgent, we can all agree!

I have been familiar and worked with the providers at the Kahm clinic for a number of years and have had many patients successfully work through various eating issues with them. Honestly I was initially hesitant due to my concern that they focused too much on numbers and I was not familiar with their use of metabolic testing and body composition analysis. Many of my patients have actually thrived with this approach. They feel safer in their journey to restore weight having the data support the meal plan.

On a personal note, I have raised three teenagers and one out of the three has struggled for years with an eating disorder and did receive treatment out of state. Vermont resources were able to help her with anxiety and depression but basically just had to ignore the eating disorder. In fact, having a child with an eating disorder you almost want ignore and minimize it just so they are not denied treatment by

resources who hear eating disorder and won't accept you. My second child is an extreme athlete and I had the benefit of attending his assessment and consult with the Kahm clinic. Almost like a "secret shopper" as we have different last names the dietician had no idea I was a physician. The provider was knowledgeable and experienced in ED informed care. My observation is that the Kahm clinic provides an in-depth individualized approach to meal and movement planning.

Again, as a parent and physician, I have experienced eating disorder programs all over the country. There is not one program that is going to work for every person with an eating disorder. This is a very complex disease. Kahm clinic has a proven record in our community of providing safe and effective care to eating disorder patients. They have data to support this and a strong reputation support this claim. Their reputation is built by clients and the medical community who feel confident referring to them.

Please support their plan to provide PHP and IOP care that will start to address the void of treatment in our state.

Dr Kathy Mariani

Kathy Mariani, MD MPH
Associate Professor
AHEC Faculty
VCHIP Faculty
Department of Family Medicine
Larner School of Medicine
University of Vermont Medical Center

TIMBER LANE PEDIATRICS

www.timberlanepeds.com

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May 2, 2022

Green Mountain Care Board
144 State Street
Montpelier, VT 05602

Dear Members of the Green Mountain Care Board,

At Timber Lane Pediatrics we care for patients and families who are experiencing eating disorders. As part of their treatment team, we are writing to express our strong support of the Kahm Clinic proposal to expand treatment options for these patients and families.

Appropriate levels of care for a patient with an eating disorder range from outpatient care to medical hospitalization. If a patient is in need of the highest level of care, we can arrange a brief hospitalization to achieve medical stability. That hospitalization does not address the underlying mental health issues that create that medical instability. At the lowest level of care we can offer coordinated outpatient care between a nutritionist, counselor, and physician. Frequently, this is a much lower level of care than would be indicated based on symptoms. Many of our patients really require an intermediate level of care (partial hospitalization or an intensive outpatient program) that currently does not exist in Vermont. This means that many of our patients alternate between inpatient medical hospitalization and outpatient care - but ultimately leave the state seeking an intermediate level of care. This alternation can be devastating for their treatment. Every time a patient with an eating disorder needs to "re-enter" a specific level of care it can cause disruption and worsen the disorder.

In the past several years we have had several patients who have met criteria for partial hospitalization and/or intensive outpatient. Given the absence of this level of care in Vermont - parents make the agonizing choice to send their child out-of-state. Our most recent patient placements to receive the appropriate level of care have included New York, Massachusetts, Colorado, Texas and Utah. Unfortunately, distant care means the parents cannot be as actively involved in the treatment program. It means the patient feels isolated from their natural support systems. Sometimes, due to the logistical or financial implications if needing to travel out-of-state - patients and families are simply unable to access care. Additionally, it means when the patients are ready to step-down to a lower level of care - there is not an appropriate place to step-down to in Vermont - leading to relapse.

Our patients and their families repeatedly ask us why there is not an in-state option for partial hospitalization or an intensive outpatient program in Vermont. When we heard that the Kahm Clinic was submitting a proposal to address this gap in our ability to provide care in-state, we were thrilled for our patients and families. We have had several patients and families receive excellent and successful nutritional care at the Kahm Clinic for their eating disorders. We would welcome the chance for the Kahm Clinic to serve our community further by providing an intensive outpatient/partial hospitalization level of care greatly needed in our state.

Sincerely,

Alicia Veit, MD
Michelle Perron, MD

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UPSTATE NEW YORK
Eating Disorder
SERVICE

May 17, 2022

RE: Letter of Support

To Whom It May Concern:

This is a letter of support for the use of Indirect Calorimetry (Metabolic Testing) and Body Composition Analysis (BCA) in the treatment of eating disorder patients. I am founder of the Upstate New York Eating Disorder Service which includes Sol Stone Center, a partial hospitalization program and the Nutrition Clinic, an outpatient and intensive outpatient program. Sol Stone Center, founded in 2004 is a twelve-bed adult program for all genders, in 2019 we opened a second location, also a twelve-bed program. We have two Intensive Outpatient Programs, an adolescent program, ages 12-16 founded in 2020 and an adult program ages 17 and older, founded in 2008. Programs are for all genders. In our eating disorder treatment programs, we treat an average of 200 clients at any given time. We have satellite programs in Syracuse, Ithaca, and Binghamton New York. Our main location is in Elmira, New York.

One of the challenges of a PHP or the IOP level of care is ensuring the safety of those in treatment. This is a patient population that although motivated to get better struggle with being honest about symptom use. Many of the symptoms that those who struggle with eating disorders use can cause them to be at high medical risk to treat. Although there are residential and inpatient treatment programs for those that are higher risk patients, it is not always apparent that a higher level of care with more supervision is needed. Examples of symptom use include fluid overloading causing hyponatremia, laxative abuse, and re-feeding edema causing hypokalemia. Use of the body composition analysis quickly identifies individuals who need STAT bloodwork and possible transfer to higher level of care.

We use metabolic testing and body composition analysis to give us information initially to evaluate the nutritional status of the individual and to help formulate an individualized treatment plan. The test results help us understand how their body responds to being underfed and how it compensates. It helps determine if the body is hypo metabolic (burning fewer calories than predicted) and catabolic (burning their own protein stores). Individuals that have a reactance level (a measurement we get from the BCA) less than 55 ohms and a phase angle less than 5.5 is an indicator of high risk for re-feeding edema.

Both tests are used to help educate the patient about how their body has responded to being underfed. This is a patient population who never believes they are "sick enough" to be in treatment. These tests results are often a game-changer with the Atypical Anorexic patient population. Seeing the results of the metabolic testing is very helpful because initially bloodwork is usually within normal limits, body weight is not low despite severely restricting their intake and seeing that their body is hypo metabolic and/or catabolic is helpful to them. It also helps them understand why they have physical symptoms when all other tests are normal.

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UPSTATE NEW YORK
Eating Disorder
SERVICE

Body Composition Analysis is a tool that we use to assess how resilient the body is. It helps identify individuals at high risk for re-feeding edema. It also measures any fluid retention and shifts from intracellular to extra cellular. This test is done every day on all clients (actual test results are not shared with the client), if there are significant fluid shifts STAT bloodwork is ordered. We also use the results to help patients realize that cell repair is needed to recover. Patients are motivated to improve at the cellular level and will focus on change in phase angle (which isn't weight based) versus change in body weight. This technology also helps identify when patients are using symptoms. Because the direct measurement of the BCA is the total body water, any behaviors that cause significant changes in fluid levels and/or shifts of water to the extra-cellular space may indicate symptom use. This helps the client be much more transparent about their symptom use.

The treatment philosophy of our treatment program is to help the client shift to internal locus of control. The more an individual understands about how their body works and what they are physically feeling (feeling bloated because of fluid retention versus fat weight gain), the more they begin to trust the body and the weight restoration process. As the phase angle improves, the patient begins to feel much stronger and fluid retention and fluid shifts are significantly less.

There are many treatment facilities that have approached me about incorporating the testing as part of their treatment program. The main reasons facilities don't opt to use the testing is because of the initial cost of the equipment and the learning curve associated with the implementation and interpretation. Historically treatment programs have focused on the therapeutic treatments and not emphasized the importance of nutritional care. Dietitians typically have had to rely on body weight changes, available lab data, and reports of intake. Nutritional support is based on science and the more we understand about how the body works, the better the quality of treatment and treatment outcomes.

Sincerely,

Carolyn Hodges Chaffee

Carolyn Hodges Chaffee, MS, RDN, CEDRD-S

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I have included some comments clients have shared about the metabolic testing and body composition analysis. These were clients recently in our treatment program.

Physician Assistant (was treated previously 3 years ago at another PHP)
"The previous treatment program I was in only focused on weight restoration. I saw no reason to maintain weight gained and I restricted my intake upon discharge. This program has been much more helpful-the science makes sense. I feel like I'm eating to repair my body. It is still a very difficult process, but I understand what is happening to my body and why. When I saw the improvement in my metabolic test it helped me trust the process and begin to trust my body cues. Hunger has always scared me and now I recognize it as a positive."

Athlete/Compulsive Exerciser (Initial admission to higher level of care)
"The more I know about the body and how it improves, not just in weight, but actual data helps me motivate myself. I don't want to damage my body. Reducing exercise has always been very difficult- the endorphin kick tells me I can keep going even when I'm depleted. Data about how over-exercising affects my body was a game-changer for me. Knowing my test results helped convince me to trust the process."

Bulimic patient, admission to 4 different treatment facilities, symptom use includes laxative abuse and compulsive exercise
"Re-feeding edema is always such a nightmare for me, my ankles double in size. Although I know it is fluid, I feel the "fat" storing on me. Being able to know I'm retaining 3-4 liters of fluid and that it has shifted to the extra-cellular space quiets my eating disorder thoughts and I am able to focus on continuing to eat."

UPSTATE NEW YORK
Eating Disorder
SERVICE

May 17, 2022

RE: Letter of Support

To Whom It May Concern:

I have been the Medical Director of Sol Stone Center, an eating disorder partial hospitalization program for 15 years. I have found the data that the metabolic testing and body composition analysis provides is invaluable in helping me treat this patient population. The testing helps me asses the client initially but also throughout the treatment. It is much more sensitive to changes in the body than bloodwork. It also allows me to assess what is happening to the body and often reduces the number of labs that are needed.

Because we are a day treatment program there is high risk for symptom use outside of the program hours. The body composition analysis measures the total body water and changes in intra cellular and extra cellular fluids. The use of the BCA helps identify any symptom use that affects the fluid levels and fluid shifts. This can include laxative abuse, diuretic abuse, water loading, restricting fluids, and self-induced vomiting. Clients are much more apt to be transparent about behavior use because they are aware it may be indicated with the BCA results.

There are many excellent psychiatric medications that can contribute to weight gain. Although one of the main treatment goals is weight restoration, clients often refuse to consider any medication that may cause weight gain. Reassuring the client that we will monitor weight changes with the BCA and that we can put them on a medication that will decrease the medication induced weight gain, helps convince them to try the medication.

We have been able to identify a variety of medical complications that may have gone undiagnosed without the testing. The metabolic testing can help identify individuals that might be insulin resistant. It has also been helpful with thyroid diseases such as Hashimoto's. The BCA has been helpful when assessing the level of dehydration. Significant changes may indicate hyponatremia, hypokalemia, and diabetes insipidus.

I feel the metabolic testing and body composition analysis are both extremely helpful data and should be incorporated in eating disorder treatment for all levels of care. If you have any questions or would further like to discuss the applications, you can contact me at 607-732-5646.

Sincerely,

Sophia Bezirganian , MD

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WILKINS CENTER for EATING DISORDERS
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June 3, 2022

Green Mountain Care Board
89 Main Street, Third Floor
City Center
Montpelier, Vermont 05620

Dear Members of the Green Mountain Care Board,

I am writing to provide professional input on in the application of The Kahm Clinic for the Certificate of Need in Vermont.

There seems to be a lot of distraction around peripheral minutiae. I believe the following facts would be unanimously supported by all in the eating disorder field and are what the decision should be based on:

KEY FACTS ABOUT EATING DISORDERS TREATMENT:

1.NO current treatment for eating disorders, at any level of care, provides complete and enduring recovery to the majority of patients for any form of eating disorder. We do not yet know how to get most people well, or even well enough.

2. Treatment delay is associated with worse prognosis.

3. Most patients with eating disorders do not receive evidence-based care, and the majority receive no treatment at all. Limited access to care, based on geography, insurance, adequate education and referral, and many other factors, is universally acknowledged to be a profound barrier to treatment of any quality.

4. There are no ratings nor any outcome data from eating disorder programs or providers at any level of care. This means that neither professionals nor families have the data to assess or compare different programs or even providers.

Based on the above, the notion that Vermont might add services for eating disorders, that this would include IOP and PHP levels of care, and that it will be made available to patients with Medicaid, and that it will be located by a university and medical school to reach sufferers from an illness with an adolescent onset -- what a huge triumph this would be for patient care, for affected patients and families. If a subset get better from this care, and that is likely, there is also potential cost saving in addition to health benefits of more Vermont residents being spared an expensive and potentially chronic illness.

KEY BENEFITS OF AUTHORIZING KAHM CLINIC IN VERMONT:

1. **Expanded services** for an illness where treatment is often unavailable, at a time of increased need.

2. **Increased access to care** for underserved populations, including those on Medicaid.

3. **Reduced financial burden to the state** for untreated populations who developed more serious and/or chronic illness and need higher levels of care and/or become disabled and unable to work.

Will body composition analysis and metabolic testing provide data to clinicians and patients to improve communication, motivation or strategy? We certainly don't know based on current research and I am not sure it matters. However, we need to keep trying new approaches to improve care. And this testing has the potential to do that. Anecdotally, I refer outpatients for such testing selectively and have found it quite helpful to many of them. Since anorexia nervosa is a delusional brain illness, concrete objective data certainly has the possibility of lessening patient and family denial and enhancing commitment to the difficult work of recovery.

I certainly hope you will make the much-needed care of an IOP with committed, highly trained staff knowledgeable about eating disorders available to those who are suffering from this illness among the people of Vermont.

MY CREDENTIALS:

My opinions are based on my treatment of 10,000 patients with eating disorders over the past 40 years. I am a Clinical Assistant Professor in the Department of Psychiatry at Yale School of Medicine. I am a Founding Fellow and past Board Member of the Academy of Eating Disorders. I am a former President of the American Anorexia and Bulimia Association (AABA) and past co-president of the National Eating Disorders Association (NEDA). I am the President of the Global Foundation for Eating Disorders, which reviews and supports the research of promising young scientists to advance eating disorder treatment. I am the Founder and Director of Wilkins Center for Eating Disorders, among the first comprehensive multidisciplinary outpatient treatment centers for eating disorder patients in the US. I am board certified in internal medicine and a Fellow of the American College of Physicians.

Please feel free to contact me if I can provide any further input.

Diane Mickley, MD

Diane Mickley MD FACP FAED
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5/13/2022

To whom it may concern:

I have worked closely with the Kahm Clinic for over 4 years and find their work to be very valuable to my clinical practice. I am a psychiatrist that solely treats patients with eating disorders and other co-occurring psychiatric conditions in the outpatient setting and this is where I work with a registered dietitian (RD) weekly that is employed by the Kahm Clinic. Additionally, I treat patients with eating disorders at the residential, PHP, and IOP levels of care at a leading treatment center for eating disorders in the United States where I am also their National Psychiatry Director.

Metabolic Testing (MT) and Body Composition Analysis (BCA) are a great tool for my patients. However, the tool is only as good as the RD using it and the Kahm Clinic has made sure to train and supervise their RD's to make sure the tool is being used correctly. The RD, in Arizona, that works at the Kahm Clinic has my utmost confidence in her work. She uses the MT and BCA to provide information in directing meal planning, nutritional rehabilitation, and overall health to my patients. It provides a road map for their care and one that is necessary because the weight on the scale, patient's subjective information, and their bodies are so variable and provide limited data for us at times. The RD is skilled in knowing how to present the data in ways that are recovery focused and patient specific. The data is not any more triggering to these patients than when they are told they need to increase their meal plan, exercise less, or engage in non eating disorder behaviors. MT and BCA give us useful data to guide our patients in their recovery from an eating disorder where monitoring numbers on the scale fall short.

In summary, I would recommend the Kahm Clinic and the use of MT and BCA in the continual treatment of patients with eating disorders and have full confidence in the care they provide. It provides another tool for us to use within the eating disorder community where relapse rates are still so unacceptably high.

Sincerely,

Brad Zehring, D.O.
Board Certified Psychiatrist and Eating Disorders Specialist