

**RENEE RIENECKE:** So, I'm Rene Rienecke. I'm Associate Professor of Pediatrics and Psychiatry at the Medical University of South Carolina and Director of the MUSC Friedman Center for Eating Disorders. And today I'm going to be talking about the diagnostic criteria for eating disorders, a little bit about the history of treatment for eating disorders, and then I'll spend some time talking about family-based treatment. And then we'll get into warning signs and a little bit about screening before turning it over to my colleague Dr. Elizabeth Wallis.

OK, so, according to DSM-5, there are five eating disorders-- anorexia nervosa, bulimia nervosa, binge eating disorder, other specified feeding or eating disorder, and unspecified feeding or eating disorder. And I'm just going to briefly go over the first four of these. So, the diagnostic criteria for anorexia are restriction of energy intake leading to a significantly low body weight. There's no strict cutoff for this, as there was in the DSM-IV, which is a good thing because it widens the ability for someone to be diagnosed with anorexia nervosa.

The second is an intense fear of gaining weight or becoming fat, or behavior that interferes with weight gain. And the third is disturbance in the way one's body weight or shape is experienced. So, experiencing oneself as much larger than someone actually is. Self-evaluation is unduly influenced by weight, or shape, or lack of recognition of seriousness of low weight, which is one of the things that makes anorexia really challenging to treat is that most people who have it don't really recognize how sick they actually are.

So, the demographics, the lifetime prevalence among adolescents is about 0.3%. It generally starts around age 12. And, I think, previously it was believed to be a disorder that primarily afflicted Caucasian women. That's actually not the case. There are no ethnic differences found in anorexia.

Reported impairment rates of 97%, which is really quite high, especially given the minimization and denial that we often see in anorexia. Impairment rates of 97 are very high. And then also very high rates of suicidality.

OK, so moving on to bulimia. Bulimia nervosa involves recurrent episodes of binge eating, which are characterized by both eating an objectively large amount of food, but also experiencing a loss of control over eating. So, feeling like one can't stop eating once they get started, or feeling like they can't control what they're eating, or how much they're eating, or how fast they're eating.

And then recurrent inappropriate compensatory behavior to try to make up for the binge eating. So, this could be self-induced vomiting, laxative use, diuretics, things like that. These behaviors have to occur one or more times a week, on average, for three months. As with anorexia, self-evaluation is unduly influenced by body shape or weight.

And it can not occur exclusively during an episode of anorexia. So, sometimes you hear people say that they have a diagnosis of both anorexia and bulimia. And, actually, you can't have a diagnosis of both. A diagnosis of anorexia sort of trumps a diagnosis of bulimia, I think, in part due to the medical severity of anorexia.

The demographics for bulimia look similar to anorexia, although the lifetime prevalence rate is a little bit higher. The median age of onset is about the same. We actually find the highest rates among Hispanic adolescents. And also see high reported rates of impairment and even higher rates of suicidality than we see in anorexia.

OK, so binge eating disorder differs a little bit from bulimia. It still has recurrent episodes of binge eating, but it has to be associated with three or more of the following characteristics. So, eating more rapidly than usual, eating until feeling uncomfortably full, eating large amounts of food when not feeling physically hungry, eating alone because of feeling embarrassed by how much someone is eating, and then feeling disgusted with oneself, depressed, or very guilty afterwards. So, it has to have three or more of those.

There has to be marked distress regarding binge eating. It has to occur, on average, at least one time a week for three months. And we see no compensatory behavior. So, there's no self-induced vomiting or anything like that following the binges. And it cannot occur exclusively during an episode of anorexia or bulimia.

The other specified feeding or eating disorder is sort of a residual category that's meant to capture any clinically significant impairments with food or eating or weight. These are some examples. This is certainly not an exhaustive list of what can be classified as OSFED.

One is all criteria for anorexia are met except weight is in the normal range. All criteria for bulimia are met except the binge/purge frequency or duration. The same thing with binge eating disorder. And then purging disorder, which we see when someone purges regularly but does not binge eat. And then night eating syndrome, which is when someone gets up in the middle of the night and overeats with sort of varying degrees of awareness of what they're doing.

One of the reasons it's important to be aware of the presence of OSFED is that most people who get a diagnosis of an eating disorder will get a diagnosis of OSFED. This is true for both adolescents and adults. This may change with a change in the diagnostic criteria with DSM-5, but that sort of remains to be seen at this point.

OK, so a little bit about the history and background of how eating disorders used to be treated and the role of the family in treating eating disorders. So, Sir William Gull was one of the first people to coin the term anorexia nervosa, and his belief about families and friends being involved in treatment was that "the patients should be fed at regular intervals, and surrounded by persons who would have moral control over them, relatives and friends being generally the worst attendants." One of his contemporaries said "it is necessary to separate both children and adults from their father and mother, whose influence, as experience teaches, is particularly pernicious." And this view of considering parents and families in the treatment of eating disorders continued for many, many years.

Salvador Minuchin described what he termed the "psychosomatic family" of patients who had anorexia nervosa. And he said that these families were generally enmeshed, overprotective, rigid, and poor at conflict resolution. So, because of these prevailing views about the way that parents should be involved in the treatment of eating disorders, for a long time parental involvement was deferred until the eating disorder behavior was under control.

Patients were often hospitalized, or sent to residential treatment centers, or somewhere separate from their families. And this was really seen as desirable because it was thought that the family would interfere with the treatment of the eating disorder, or what was called so-called parentectomy back then. It was believed that outpatient care should really emphasize the adolescent's need for separation, individuation, and autonomy since these are adolescent's developmental challenges. And it was thought that, again, parents would just get in the way of that.

And this view of involving families in treatment, or not involving families in treatment, really continued up until about the 1980s at the Maudsley Hospital in London. So, Ivan Eisler, who's sort of the godfather of family-based treatment, had a very different view of families. He said, "the difficulty arises when the clinical account of what may well be an accurate description of the family dynamics in some families with an anorexic child is generalized to become the explanatory model of anorexia nervosa."

So, he said, it's true that, when some families present in your office, they may seem anxious, or they may seem overprotective, or enmeshed, or rigid, or poor at conflict resolution. But he saw this not as the cause of the disorder, but rather as the result of living with somebody who had a potentially life-threatening illness and the way that that dynamic affects family life over time.

So, now we'll get into a little bit about what family-based treatment looks like. It's also called the Maudsley Approach or the Maudsley Method sometimes. In the US, it's really been refined by Daniel Le Grange, who until recently was at the University of Chicago, and Jim Lock at Stanford University. And, there are some things that make it unique in comparison to other forms of treatment.

One is that it's theoretically agnostic. So, the idea behind FBT is that we don't really know why someone develops an eating disorder. These are complex multifactorial illnesses. There's no way to know for sure why someone developed it. Also, even if we could know for sure, that doesn't necessarily translate into recovery.

So, basically, the idea behind FBT is to figure out not so much why we got to where we are now, but what are we going to do going forward. So the focus is really on what can be done going forward. Parents are viewed as a resource with no blame directed toward either the parents for causing the illness or the adolescent for developing it. And, because of emerging research evidence for it, it's really considered by many to be the first-line treatment of choice for adolescents with anorexia. But there is some preliminary evidence for use with adolescents with bulimia and for young adults with anorexia.

So, a little bit about what FBT looks like. It's been studied in a few different formats. It's generally 10 to 20 sessions over about six to 12 months. And it's been studied in both conjoint, when the whole family is seen together with a therapist, and also separated, when the therapist meets alone with the patient and then meets separately with his or her parents. Separated format is actually preferable for families where there's a high degree of parental criticism or conflict.

And one thing I'd just like to point out about this is that FBT is not super time-intensive as far as therapy goes. It tends to work pretty quickly. Now, there are three phases of FBT. So, in the first phase, parents or families-- it is explained to families that because of the way that eating disorders, particularly anorexia, affect people is that it makes them really, at best, ambivalent about getting treatment.

Most people with anorexia-- it's described as an egosyntonic disorder. So most people with anorexia have mixed feelings about giving it up. So, you have ambivalence about getting better combined with a potentially life-threatening illness, which is a really bad combination to have. So, instead of putting kids in charge of the recovery process, we take that job away and give it to parents.

So, we say that we want to keep kids out of the hospital if possible. And, in order to do that, we're going to give parents the job of weight restoration, which means that they decide what their kids are going to eat and how much they're going to eat, when they're going to eat. They monitor all their meals and snacks, and they curtail most physical activity during phase one. This sort of replicates what would be done on an inpatient or residential unit but at home, in their day to day environment, with their support system around them.

Now, this isn't done for any longer than is really necessary. Once the patient has started to gain weight, once the eating disorder cognitions have started to recede, once they're not as resistant to parental involvement in treatment, then, gradually, control over eating is handed back to the adolescent to whatever extent is, sort of, age-appropriate and normal for that particular family. Then, once all is said and done and the patient is really in a much better place, then there will be some discussion of adolescent development issues, developmental challenges that are coming up, and how the family can help the adolescent navigate those challenges without reverting back to the eating disorder as a way to cope. There will also be some discussion of relapse prevention during Phase Three.

It's appropriate for kids who are medically stable, usually above 75% of their expected body weight. It's an outpatient intervention designed to restore weight and put the adolescent back on track with normal development. It's probably not-- it's a lot of work for families, so it's probably not suitable for families with really severe parental psychopathology that's not managed, or a serious discord in the relationship between the parents. That being said, this doesn't keep us from doing FBT with parents who have active eating disorders themselves or with divorced families. Although, those situations can certainly be trickier.

OK, FBT has been manualized. There is a treatment manual for anorexia nervosa and for bulimia nervosa for clinicians. And there's also a parent handbook called *Help Your Teenager Beat An Eating Disorder*. All these are highly recommended for anyone who wants to get a little bit more information about family-based treatment.

OK, so moving into intervention. If you see a patient that you suspect has an eating disorder, I think one really important thing is to refer them quickly to an eating disorder specialist. There are not a lot of treatments out there that have been shown to work for eating disorders. So, working with a specialist who has familiarity in those empirically based forms of treatment, I think, is really important.

Not taking a wait and see approach. We've had many patients who see their physicians, who have lost a little bit of weight, the physician says, "well, let's kind of wait and see what happens, there's no need to do anything about it now." And, you know, the patient ends up losing 30 more pounds and has to be hospitalized. I think, as soon as we start to see some concerning weight loss, we want to intervene. There's no reason to allow the disorder to get worse before it gets treated.

Viewing parents as a resource is really important. Again, there is really no evidence that, as people believed for so many years, there's no evidence that parents cause eating disorders. And there is really no one who is as invested in their child's recovery as their own parents. So, I think, for the vast majority of families, parents should be viewed as their child's best resource, really best hope for recovery, and, in FBT, the main agents of change, really, in treatment.

Alleviating parental guilt is really important. Even though we know that parents don't cause eating disorders, many parents come to us having been told by their treatment providers that this is their fault or that they must have done something to cause this. Parental guilt is really not helpful. It undermines parental confidence and makes their job in family-based treatment much more difficult to do if they don't believe in themselves that they can defeat the eating disorder.

So, we want parents to be anxious. Anxiety can be a good motivator. And they should be anxious. These are very serious disorders. But parental guilt is not helpful.

Being aware of the presence of eating disorders in men and in members of ethnic minority groups. These are often overlooked because they are believed to be less common. Whether that's true, again, doesn't necessarily seem to be the case. Looking for early signs and symptoms, which we'll go over in just a minute. And then being aware of myths and misconceptions about eating disorders, which we'll also talk about briefly.

So, looking for early signs and symptoms-- any changes in weight, any significant changes in weight, a change in mood or performance in school or at work, a sudden interest in diet talk or books or magazines or food shows. We have a lot of our patients start, all of a sudden, watching Food Network all the time. If this is a change from their regular interests, then this is something to look out for.

Fatigue or lack of energy, a sudden interest in cooking for others but not necessarily eating what they're making, sudden decision to become a vegetarian or vegan. Certainly there are some kids who can do this successfully, and it's not a problem. But, for many, it is the pathway that starts them down the road to an eating disorder. So this is something to definitely be aware of if it happens.

Increased picky eating, especially eating only healthy foods. So, stopping certain groups of foods, or not eating carbs, or fats, or things like that. Always going to the bathroom immediately after eating to purge.

Multiple showers in a day, especially following meals. That can be an effort to cover up the noise of purging. Skipping meals or large amounts of food missing. And then any evidence of visiting pro-anorexia or eating disorder websites.

OK, and then just being aware of some myths and misconceptions about eating disorders. Like we've already gone over, again, there's still this unfortunately common belief that parents are dysfunctional, families are responsible for causing a child's eating disorder. And we really know that that's not the case.

People with eating disorders choose their illness. They want to be sick. This is also not true. This can be confusing for families, sometimes, because some of the behaviors that kids start to engage in that start going down the path for an eating disorder can be volitional.

So, they may choose to start eating more healthy, or they may choose to start exercising more. That may be within their control. But, at some point, kids cross the line into an eating disorder, and that's what they don't mean to do. And, generally, they just need help getting back over that line. They certainly don't want to be sick.

People with eating disorders want attention. Again, this is definitely not true. People with eating disorders aren't doing anything-- aren't engaging in their eating disorder, really, for other reasons other than just being in the eating disorder.

Eating disorders are about control is another common belief about eating disorders. This may certainly be true for some people, but it's definitely not true across the board. And this tends to be a problematic belief about eating disorders.

One reason is that a common criticism of family-based treatment is that people will say to parents, "how can you take control away from your child when they're just trying to exert some control over their life in one area that they feel like they can control?" The way that we would respond to that would be that family-based treatment does not take control away from the patient. It takes control away from the eating disorder and temporarily gives it to parents until the patient is feeling strong enough to be able to take that control back.

Underlying issues need to be addressed in order for someone to recover. Forms of treatment that look at or look for underlying issues that have more of a psychological focus, as opposed to the more behavioral focus of family-based treatment, those treatments have been compared head to head and the more psychologically focused treatments just don't do as well as family-based treatment and other behavioral forms of treatment. So there is no real evidence that there are any underlying issues that need to be addressed. Again, people sort of cross that line accidentally and just need help getting back.

It's just a phase, they'll grow out of it. Most people don't grow out of an eating disorder. Most people do need help and treatment in order to recover.

Another very popular and very unfortunate belief is that people with eating disorders never truly recover. I've heard a lot of very intelligent and well-meaning health care providers say this to their patients. It's really not true.

I think this is based on some very old data that had, sort of, a bleak prognosis for people with eating disorders. But the landscape of treatment for eating disorders has changed dramatically in the last 40 or 50 years. There are effective treatments now and people really can recover and really put it behind them.

People with eating disorders are just being difficult or stubborn. They could get better if they wanted to. Again, when it comes to issues of food and eating and weight, the eating disorder is in control.

The eating disorder is really calling the shots. It is not as easy as, just eat. People with eating disorders aren't able to do that. And they really do need help in order to get them back over that line.

And then, finally, that OSFED is not as serious as full threshold anorexia or bulimia. This is actually not true. There have been several studies of OSFED comparing it to full threshold anorexia or bulimia, and it found that, medically, they're just as serious, and these patients need treatment just as badly as full threshold diagnoses and benefit from treatment as much as full threshold diagnoses. All right, so now I will hand it over to Dr. Wallis.

**ELIZABETH  
WALLIS:**

Hi, I'm Elizabeth Wallis, and I'm a general pediatrician by training, Assistant Professor of Pediatrics, and the Medical Director for the Friedman Center for Eating Disorders. And, to dovetail on what Renee has talked about, I'm going to spend a little bit of time talking about the medical assessment of a patient who you are concerned may have an eating disorder, the monitoring of that patient, as well as how to support a patient who may be engaged in family-based treatment and engage with the clinician and the therapist to really be collaborative in the treatment of these patients.

So, as Dr. Rienecke mentioned, having a high index of suspicion for an eating disorder in an adolescent is incredibly important. It is very common for patients to come in while still a, quote unquote, "normal weight" and really be engaged in very serious eating disordered behavior. It is important to make sure that the patient-- that there's not another medical reason for the weight loss, such as a thyroid disorder, Crohn's disease, something like that, as well as assessing the patient's medical stability.

At the end of the day, the medical provider is typically the person who can help decide whether this patient is appropriate for outpatient treatment, or whether they are ill enough that they need to be hospitalized. Oftentimes, as a pediatrician, our role is around doing some emergency assessment of anything, mental health, that may be emergent or potentially dangerous, like suicidality. So, assessing that in patients that you're seeing for a new evaluation for an eating disorder is incredibly important. And then, laboratory, and cardiovascular testing, and anything else that may be needed is also important in your initial assessment. And we'll talk about what those are in just a minute.

So, many of us follow growth charts very closely in our primary care practices. And the point that I want to make about this is this is a patient who typically would still fall within a normal weight range, as well as a normal BMI, but has had a very precipitous loss of weight over a relatively short period of time, and so really should prompt our attention to whether or not this patient has an eating disorder, or what could be going on. Just because they are a normal weight does not mean that they are not really seriously ill.

So, to talk briefly about the complications of eating disorders-- many people think first about the cardiovascular symptoms, and these can often be the things that are most present in patients that we see. So, hypotension, especially orthostatic hypotension-- so dizziness when they stand up, lower blood pressure when they stand up-- bradycardia, dizziness, palpitations, arrhythmia. Autonomic dysfunction is common in patients, particularly with anorexia nervosa who are very, very malnourished.

You can actually see, basically, that they can't tolerate changes in position, things like that. So you may be looking for bradycardia when, in fact, the patient may become tachycardic with only slight movement because they've become so impaired, they've got some autonomic dysfunction. Exercise intolerance is also relatively common.

And, I think, perhaps the most important thing to take away is that patients may be somewhat asymptomatic. So they may not complain of dizziness or palpitations. And that may be because they're engaged in their eating disorder behavior and are worried of having to give up that behavior.

But it may also be that they don't notice it. But they may have very profound vital sign anomalies. So don't assume, just because the patient is not dizzy or does not have symptoms of their cardiovascular compromise, that they're not particularly ill.

Gastrointestinal symptoms are also very common. So patients will complain of feeling full, of having delayed gastric emptying, of having a lot of symptoms of reflux or heartburn, constipation. A lot of times you can see a mild transaminitis or an elevation of the AST and ALT. You may also see, particularly again in anorexia, that patients can have a dyslipidemia, probably stemming from the fact that they're using whatever stores that they have. And so their cholesterol can actually be elevated, initially, when they're very malnourished.

Other things to keep a close eye on are patients' electrolytes. In the case of purging, the classic electrolyte pattern to see is a hypochloremic metabolic alkalosis that comes from vomiting, primarily. You can also see hypophosphatemia, hypomagnesemia, hypokalemia. And these are probably the most important labs that you're going to keep track of, especially in patients that you're concerned about refeeding.

In patients with long standing eating disorders, you can see renal dysfunction, elevated creatinine, and some early renal failure. You can see hypothalamic suppression. So this, generally, is a central hypothalamic suppression that comes from a low GnRH that then, sort of, that whole pathway is affected.

And these are patients who may not have their menstrual period anymore. They may be very intolerant to cold, for example. And this all comes from the HPA axis suppression. Over time, too, one of the big complications of anorexia nervosa is a reduced bone mineral density. And we'll talk about when these patients should be screened for that.

And then again, late, particularly in anorexia, patients can have bone marrow suppression. So, I will often see patients who have a mild leukopenia, or who have a mild anemia, especially, like I said, as their anorexia gets more significant in terms of their degree of malnourishment. And then, with years of eating disorder, you can actually see changes in the brain in terms of the amount of white and gray matter and impaired neuropsychological functioning. Early on, this is usually changes that are reversible. But, in patients with chronic eating disorders, especially anorexia, these are changes that may be longstanding.

So, in terms of an evaluation for a new patient that you see with a suspected eating disorder, these are generally the laboratory studies that I do in most patients. And there are circumstances in which other testing would be indicated. But, as a baseline screening, I typically will start with a CBC with differential. Again, to look for a leukopenia, anemia, or other abnormality.

A complete metabolic panel is important, which includes liver function tests and includes magnesium and phosphorus. I do screen these patients for vitamin D deficiency. Again, knowing that if they are restricting, that their bone mineral density may be impaired. So, to further impair that by an abnormal vitamin D would not be ideal.

I do send an amylase in patients who I have concern for purging. And I do usually do a screening TSH. An EKG is indicated for all patients who present with purging. I do not do one in every patient with anorexia. But certainly, if you are worried-- if the patient's having palpitations or you have significant vital sign instability-- it is very appropriate to do a screening EKG.

And then, typically, I will start to do bone density monitoring in patients who have had anorexia nervosa for greater than two years duration. Under two years, there is typically not the same bone mineralization abnormalities that you see in more chronic anorexia. And so, in patients who've had it for more than two years, I do do a screening bone density to know where they are. And then we'll follow that, depending on the results and their treatment course.



So, much as we try very hard to keep these patients out of the hospital, there are patients for whom inpatient evaluation or stabilization is going to be warranted. This is certainly not an exhaustive list, but these are the patients that I think about certainly hospitalizing. So, any patient who is less than 75% of their expected body weight may be a patient who is so severely impaired that they may need at least inpatient stabilization. Patients who have a resting heart rate of less than 40 probably need to be hospitalized because, remember, if their resting heart rate when they are awake is less than 40, it is probably significantly lower when they are asleep.

Patients who are hypotensive or who have significant symptomatic orthostatic vital signs are probably patients who need to be hospitalized. Any patient that you have a significant electrolyte abnormality probably needs hospitalization. And then patients who are at high risk for refeeding syndrome.

And again, this is not an exhaustive list, but the three things that I think about that increase your risk of refeeding syndrome are typically patients who have a BMI of less than or equal to 14, patients who've had a weight loss of at least 10% of their body weight within a short period of time, say a month or so, and patients who have complete fasting for long periods of time, so five days or longer typically.

So, I want to talk quickly about some things that we know do not work for anorexia and bulimia and OSFED. So, medicines that stimulate the appetite typically do not work. Eating disorders are not a disorder of appetite. And so using medicines like cyproheptadine or Periactin are not terribly helpful.

We also know that in patients with anorexia nervosa, when their weight is very low and they are malnourished, or they have significant medical complications from their anorexia, like bradycardia or hypotension, they do not benefit from SSRIs in the way normal weight patients would. The idea of this being that an SSRI inhibits serotonin re-uptake, and if you don't have enough nutrients to make serotonin, an SSRI is not going to be particularly beneficial.

The other things that we have to be careful about using, or not using in this case, are pro-motility agents, like Reglan or erythromycin. There are some specific scenarios in which this is helpful, but, in all truthfulness, a lot of these patients will have some discomfort when they start to eat again more consistently. And so us doing good anticipatory guidance is probably more important than treating these things medically.

And then contraception or exogenous estrogen to resume menses is something that, if you have a patient who is sexually active, certainly is something that they would need to be on contraception. But there's no benefit in providing these patients with exogenous estrogen. They will get return of their menses, but they will not get the benefit that estrogen provides in other things, like bone density and things like that. Really, the only thing that helps in that case is weight restoration. And then we lose the marker of health that we get by patients naturally having a return of their menses when they achieve a normal body weight or close to normal body weight.

So, what does work? Well, a lot of these patients will need frequent appointments to monitor their medical symptoms and their weight. It is reasonable to ask patients to gain one to two pounds a week as an outpatient goal. You can typically have a little bit faster weight gain in a more intensive scenario. But one to two pounds a week is very reasonable for patients.

I absolutely restrict physical activity, including gym class. And I monitor these kids, their vital signs and their laboratory values, pretty closely for the first few weeks. And then, sort of as they start to get better, space their appointments out a little bit more.

So, I want to switch gears and talk a little bit about, as a pediatrician, how to collaborate with an FBT provider because, the truth is, family-based treatment is a little bit different than a lot of traditional eating disorder therapies. And we are very fortunate in that there's a lot of empiric support for it. But it does require a slightly different approach in thinking about the patient and the family.

And so, some of the things, as a pediatrician who's collaborating with an FBT team, that I do is it's very important for us to express the seriousness of the eating disorder and how important it is for patients to become weight restored. We also need to stress the importance of full weight restoration and not just putting on a little bit of weight. We know that these patients do better if they achieve their ideal body weight. And families need to understand that it's really important that this happen quickly.

It is important to review medical complications with the family and also to know what to look for. And then seeing these patients on an ongoing basis, even if it's a quick check in of their weight, their vital signs, is important for us to do.

So, other things that I try to do as a pediatrician-- and I think that one of the advantages, sometimes, as a primary care physician in working in this team role is that you do have a relationship with the family and the family trusts you. Being able to remove blame from the caregivers is really important, being able to say to families that this is not something that you did, or something that you did wrong, but rather something that we're all going to collaborate to help get your child better. This also can be very empowering for caregivers, for parents to be able to support and really directly be involved in their child's recovery.

This is also something that is similar in terms of how we counsel many other families on behavioral strategies. So, the idea of saying, you know, I'm not going to have you-- we don't want you to negotiate with the eating disorder. We do want you to take a firm stance on what the child needs to eat. And you don't need to be critical or mean. You want to be very warm and supportive.

But really, it's a lot about consistency. And so a lot of this counseling is actually very similar to some of the counseling that we do with our families in terms of other behavioral strategies, whether it's getting your kid to do his chores or getting them to eat.

As a medical provider, my job with the FBT therapist is to really provide regular input about a patient's medical status. It's very important for the therapist to also reinforce what they're being told by the physician. So, if there's an abnormal lab test or an abnormal vital sign, it's important for the clinician to know that so that they can then, again, stress the severity of illness and the urgency in getting that child back to a healthy, natural weight.

Also, it's very important to discuss weight goals. And we'll talk about choosing a weight goal, as well as exercise parameters. Family-based treatment typically, as in most eating disorder treatment, will restrict exercise initially. And again, in a treatment that really empowers the family, the child's return to exercise is often a family discussion and not just the role of the physician or the therapist to talk about when that's appropriate.

So again, if we're making recommendations, it's important that we collaborate with the therapist on what those are. And then again, perhaps most critically is if we have a patient who is medically unstable, or is in need of hospitalization, or is close to that point, it's really important to communicate that information to the therapist.

So, I share these pitfalls as things that I have done in, sort of, collaborating and when I initially started practicing with FBT clinicians. So, FBT is not a directive treatment. It really does empower parents to make decisions about what their child needs, to decide what their child needs to eat, and when, and how much.

And so, unlike a lot of what we do as pediatricians, we really act as a consultant. We empower the parents. But you have to be careful not to tell them what to do. And that is different from giving suggestions around high calorie foods and other things that they can do. But we really do want to empower the parents to make some of these decisions and help decide what their child needs.

It also does, sometimes, require a shift in the relationship between parents and the teen and the primary care physician. A lot of what we do in taking care of teenagers is really to try to encourage their autonomy and encourage collaboration and mutual trust and respect. And the truth is that, in the case of eating disorders, these kids are often pretty ambivalent about treatment, or really entrenched such that they don't necessarily feel that they want to change their behavior. And our goal has to be really to not sort of collaborate or collude with the eating disorder, but rather take a firm stance, and say the most important thing is that your child gets well, even if that means that, for a period of time, the teen may not feel particularly aligned with you.

So, other things that we can do as pediatricians, we can help with food and nutrition. Understanding the natural history and what happens when patients refeed or start to regain weight is very important. So, it is important to talk with teenagers and with parents about the fact that adolescents generally have fairly high caloric needs for weight gain, and that a lot of times, when they begin weight restoration, they can actually enter this hypermetabolic state in which their basal metabolic rate is faster than it ever was previously. And so a lot of these kids, for a period of time, need very, very high calories to gain weight and may need that, even for weight maintenance, for a period of time. And so being able to do some of that psychoeducation with families can really help them to understand how to choose what their kid eats and how much.

As I've mentioned previously, the importance of talking about total weight restoration, and getting to that ideal body weight, and not just some weight gain. And then, I think, also very important is helping families to navigate some of the common medical complaints, as well as the complexities-- sorry, the complications, excuse me. So for example, patients with anorexia or with bulimia are often going to have GI symptoms when they start to eat regularly and not purge.

Many of these kids have eaten very small amounts for a long period of time, and they have a lot of discomfort. They may feel very full, they may feel a little bit nauseous, their bowel habits may change. And it's very important for us, as providers, to tell families what to expect so that they can understand what's normal and when they need to be concerned.

I tell a lot of families that if they're not having some discomfort when they're eating, initially, and they're trying to gain weight, they're definitely not eating enough. The other things to talk about are things like things we are looking for that are encouraging. For example, when a teenage girl resumes her menses, that's a real marker of health in terms of how these kids are doing and getting back to normal functioning.

So, in terms of setting a goal weight, there is not an exact way to do this. But a growth chart is imperative and incredibly helpful. So, I will typically look at the previous weight and growth trajectory and what percentile that child has been in. Sometimes I need to gather this data from multiple prior providers.

I do look at the mid-parental height. And then I look, basically, at the median body weight based on normalized growth charts. And I will typically give patients a five to 10 pound range of what I think their ideal body weight would be based on that data.

Certainly, in patients who are hypermetabolic, or in patients who have not achieved their adult height yet, there's going to be some fluctuation in that. And I tell them, and I typically say that this is a minimum, but we may find that your natural healthy weight is actually a little bit higher. But it can help families to have at least a weight range in mind so they sort of know what they're shooting for.

So quickly, I want to talk about some of the benefits from the pediatrician in terms of managing eating disorders. So, the majority of children see a pediatrician, or a family physician, or some kind of primary care provider. And it really is our job to recognize these patients early because they typically present to us and not to somebody else. We often have a longstanding relationship with the family, and so we can know what the family dynamics are, as well as the strengths of the family.

We also have knowledge and expertise that we really use in other areas of pediatrics that makes family-based treatment actually very similar to this. And I'm going to give an example quickly. So, I often say that failure to thrive treatment is not dissimilar from family-based treatment.

So, when I see a patient with failure to thrive in my office, a preschool or a school-age child, if I've ruled out a medical cause, it's often related to insufficient intake. And that may be that the kid has an oral aversion, they may be picky eaters, they may just not have a great appetite because they drink juice all day. There are many medical causes, but in these kids who we know that their calorie intake is insufficient, we often do the following.

So, we counsel families. We talk to them about what it is as a picky eater, how to manage that. We talk to them about food refusal. And we talk to them about some of the same principles. We don't give them a meal plan and say, eat this many exchanges of carbohydrates and this many exchanges of fat.

We talk to them about choosing high calorie, you know, calorie dense foods. We talk to them about using liquid supplementation, but not entirely. We talk to them about being consistent and setting up meals and goals. And we set weight gain goals. And we may use a dietitian, but a lot of times, really, we manage this in the office ourselves.

The other thing I would say is that pediatricians can be very good coaches. So, a lot of what we do is about supporting parents and about teaching them new skills. And the same is true in terms of family-based treatment for eating disorders. So, really working with families to empower them and say, this is something that you can do, and you can really help in terms of restoring your child's health.

So, a couple of challenges that I will say, and, again, these are typically pitfalls that I have done. So, patients, teenagers in particular, are often ambivalent, angry, frustrated, entrenched in their eating disorder, and not necessarily ready to seek treatment. And so it can be very tempting to try to negotiate with the eating disorder, rather than the teenager, to get them to engage in treatment.

And that may be saying, well, you only have to eat this much, or you only have to do this. And really, we know that in eating disorders, it's got to be 100%. And it's got to be that the teen starts to eat, and starts to eat consistently, and is not able to engage in eating disorder behavior.

The other thing is that, sometimes, by doing this, we may pit the teen against the parents who are trying to follow an FBT approach that they've been counseled by a clinician. And so we need to be really helpful in terms of aligning ourselves with the teen and with the parents and not accidentally undermining them. We can also talk, too, about ways to ensure autonomy in other ways. So, in a teen who is gaining weight and achieving weight restoration and compliant with treatment, we can talk about ways to allow autonomy in other aspects of their life that's not related to food or meals.

And then again, I think, with parents it can become very overwhelming, and they can get quickly frustrated. And so, sometimes it can be easy to suggest a higher level of care because parents seem so overwhelmed. And sometimes we do them a disservice by that because they may otherwise be successful. And so, you know, allowing them a little bit of a learning curve, but still saying, this is incredibly important, it has to be a priority, and it has to be urgent.

So, I'll quickly go through a couple of common misconceptions about family-based treatment. The idea that it works in all patients is not true, and Dr. Rienecke talked about this a little bit. This is not a treatment that we only use for, sort of, easy cases or patients who are early in their eating disorder. It can be effective for patients who are quite ill, as long as they don't need inpatient hospitalization or stabilization.

FBT has been shown to be effective not just in adolescence but in young adults in a similar treatment approach. And you do not need to have a perfectly nuclear family. It is certainly something that requires the support of an adult caregiver, but it doesn't necessarily have to be a two provider house-- a two parent household. And then again, the idea that FBT does not allow the provider and the therapist to have a therapeutic relationship with the patient is not true, even though it may be that you have to take a very firm and consistent stance against the eating disorder.

Lastly, I'll very quickly mention some other options that may be helpful in patients with anorexia or with bulimia. Making sure that families have the support of the school system is incredibly important. So again, remembering that nutrition and weight restoration are the most important priority. That may mean that the child needs to eat in a supportive environment, or with the parent at school, or they may need to miss periods at school to go to treatment, appointments, and things like that. And so using 504s and IEPs can be incredibly helpful.

The other thing is that families who are going to engage in family-based treatment need to support and supervise all meals. And so, sometimes, that means applying for FMLA or similar through their job. And this is something that, as physicians, we're able to help assist in some of these areas.

So, just to conclude, really early identification and treatment is incredibly important. A normal weight teenager does not mean that they don't have an eating disorder and does not mean that they don't have significant medical complications. We would encourage people to really think about screening.

And I'm going to talk about a brief screening tool in a minute. And then, I think, using the resources in your community. We are available and would be happy to assist however we can, in terms of assessment of these patients, management, or coaching.

And then, quickly, a questionnaire that I have used in primary care is the SCOFF questionnaire. It's fairly quick. And you can help think about, when you have a patient who you might have concerns, or even just a patient that you're seeing for their well visit that you want to screen, this five question screener is relatively quick.

So the S is, do you make yourself sick because you feel uncomfortably full? The C is, do you worry that you've lost control over how much you eat? The O is, have you recently lost more than one stone or 14 pounds-- clearly an English screener-- in a three month period? Do you believe yourself to be fat when others in your life say you are too thin? Or would you say that food dominates your life?

And if a teen answers yes to two or more questions, it really warrants additional assessment and evaluation. But this is a good screening tool, both for all your patients, as well as thinking about a screening tool for patients who you might have even the most tiny concern. And with that, we will close, and say thank you very much for your attention.