American Academy of Allergy Asthma & Immunology

Integration of Mental Health Care into Food Allergy Practices: A Work Group Report of the AAAAI Integrative Medicine Committee

Linda Jones Herbert, PhD[a,b], Grace Cushman, PhD[c,d], Amy Hahn, PhD[e,f], Tamara Hubbard, MA, LCPC[g,h], Stephanie Ann Kubala, MD[i], Jennifer LeBovidge, PhD[j,k], Kaitlin Proctor, PhD, ABPP[l,m], Jennifer L.P. Protudjer, PhD[n,o,p,q], Ashley Ramos, PhD[r,s], Lisa B. Rosenberg, MEd, MSW, LCSW, CSSW[t], Nancy Rotter, PhD[k,u], and Sara Voorhees, PhD[j,k]

Washington, DC; Providence, RI; Philadelphia, Pa; Boston, Mass; Columbus and Cleveland, Ohio; Atlanta, Ga; Winnipeg, MB, Canada; Stockholm, Sweden; Chicago, Ill and Cherry Hill, NJ

Patients with food allergy, clinicians, and researchers have identified mental health support for patients diagnosed with IgE-mediated food allergy and their caregivers as a clinical priority. However, resources that provide guidance on how to integrate mental health professionals into food allergy clinics are lacking. A work group within the Integrative Medicine Committee of the American

[a]Division of Psychology & Behavioral Health, Children's National Hospital, Washington, DC
[b]Department of Pediatrics, George Washington University School of Medicine, Washington, DC
[c]Department of Psychiatry and Human Behavior, Alpert Medical School of Brown University, Providence, RI
[d]Department of Psychiatry, Bradley/Hasbro Children's Research Center, Providence, RI
[e]Division of Psychology & Behavioral Health, Nationwide Children's Hospital, Columbus, Ohio
[f]Department of Pediatrics, the Ohio State University, Columbus, Ohio
[g]Tamara Hubbard, LCPC, LLC, Chicago, Ill
[h]The Food Allergy Counselor, Inc, Chicago, Ill
[i]Division of Allergy and Immunology, Children's Hospital of Philadelphia, Philadelphia, Pa
[j]Division of Immunology, Marcus Autism Center, Boston Children's Hospital, Boston, Mass
[k]Department of Psychiatry, Harvard Medical School, Boston, Mass
[l]Department of Pediatrics, Emory University School of Medicine, Atlanta, Ga
[m]Children's Healthcare of Atlanta, Atlanta, Ga
[n]The Children's Hospital Research Institute of Manitoba, Winnipeg, MB, Canada
[o]Department of Pediatrics and Child Health, University of Manitoba, Winnipeg, MB, Canada
[p]Department of Foods and Human Nutritional Sciences, University of Manitoba, Winnipeg, MB, Canada
[q]Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden
[r]Department of Pediatrics, University Hospitals Rainbow Babies and Children's Hospital, Cleveland, Ohio
[s]Department of Pediatrics, Case Western Reserve University School of Medicine, Cleveland, Ohio
[t]Safe and Included, LLC Food Allergy Counseling and Consulting, Cherry Hill, NJ
[u]Department of Psychiatry, Massachusetts General Hospital, Boston, Mass

No funding was received for this work.
Conflicts of interest: L. J. Herbert receives funding from the National Institute of Allergy and Infectious Diseases and reports receiving speaker fees from Food Allergy Research & Education and Food Allergy and Anaphylaxis Connection Team. T. Hubbard reports being on the Education Advisory Council for Food Allergy Research & Education (FARE) and receiving honorariums for this role. In addition, she is on the community advisory board for Center for Food Allergy and Asthma Research. She reports receiving speaker honorariums from FARE and Thermo Fisher, and a project honorarium from Allergy & Asthma Network. She has also received an advance from Johns Hopkins University Press for her book. K. B. Proctor reports receiving speaker honoraria from FARE. J. L. P. Protudjer is section head of Allied Health and co-lead of Research Pillar for the Canadian Society of Allergy and Clinical Immunology, and is on the steering committee for Canada's National Food Allergy Action Plan. She reports consulting for Ajonomoto Cambrooke, Novartis, Nutricia, and ALK Abelló. She holds competitive research funding from Canadian Allergy, Asthma, and Immunology Foundation, Canadian Institutes of Health Research, Research Manitoba, Health Sciences Centre Foundation (Manitoba), Children's Hospital Research Institute of Manitoba, University of Manitoba, and Social Sciences and Humanities Research Council of Canada. The rest of the authors declare that they have no relevant conflicts of interest.
Received for publication July 30, 2025; revised August 27, 2025; accepted for publication August 29, 2025.
Available online November 4, 2025.
Corresponding author: Linda Jones Herbert, PhD, Division of Psychology & Behavioral Health, Children's National Hospital, 111 Michigan Ave, NW, Washington, DC 20010. E-mail: lherbert@childrensnational.org.
2213-2198

https://doi.org/10.1016/j.jaip.2025.08.034

Abbreviations used
ACT- Acceptance and commitment therapy
ARFID- Avoidant/restrictive food intake disorder
CBT- Cognitive-behavioral therapy
FA- IgE-mediated food allergy
MI- Motivational interviewing
OFC- Oral food challenges
OIT- Oral immunotherapy
PPPHM- Pediatric Psychosocial Preventative Health Model

Academy of Allergy, Asthma & Immunology convened to develop a guidance paper that fills this gap. The report was developed as a practical guide for providers working with patients with food allergy. The report provides specific information on evidence-based mental health treatment approaches and models of care for meeting the mental health needs of patients with food allergy. Further, the report discusses ways that mental health professionals can contribute to food allergy clinics beyond clinical care, including training and research. Tables in the report provide concrete recommendations and resources supporting integration of mental health supports in food allergy clinics. **(J Allergy Clin Immunol Pract 2025;13:3227-36)**

Key words: *Food allergy; Mental health; Psychology*

Mental health concerns related to living with IgE-mediated food allergy (FA) are well documented, and individuals who treat FA have indicated that addressing these mental health concerns is a major priority.[1-3] Indeed, a prior American Academy of Allergy, Asthma & Immunology work group report on best practices for oral food challenges (OFCs) explicitly recommended inclusion of mental health support during these procedures due to recognition that OFCs can elicit anxiety among patients and caregivers.[4] Despite this recommendation and the documented need for mental health support, it is challenging for patients with FA in the United States and their caregivers to access mental health professionals who have FA expertise because of cost, lack of insurance coverage, lack of providers, lack of licensing across state lines, non−cost-related barriers to access such as childcare, transportation, and limited time off work for appointments, and general stigma toward accessing mental health care.[5] Thus, FA medical providers in the United States may describe feeling that they are in a bind—they know that some of their patients need FA-related mental health support but do not know how to facilitate access to these services. This historical lack of guidance represents a gap in FA care—other medical professional associations, such as national diabetes and pediatric oncology associations, have published standards of mental health care for their patient populations, providing examples of and precedent for the development of similar resources in FA.[6,7] Although there are a few papers that delineate the types of psychotherapeutic treatments that mental health professionals can offer patients with FA and their caregivers,[8,9] there is no overarching paper that provides guidance on how to integrate mental health professionals into FA practice.

Mental health professionals can offer their expertise to improve the lives of patients with FA and caregivers in a variety of ways, including through clinical work, research, patient and provider education, program development, and advocacy work. In addition to the implementation of psychotherapy, mental health professionals can play a major role in the promotion of health behavior and the reduction of negative health outcomes. This work group report aims to summarize best practices and considerations for integrating mental health care into FA practices across the United States. This report will reference specific types of FA practices as relevant (eg, academic institution and private practice), and we acknowledge that some of the recommendations may be most feasible for FA practices embedded in academic medical institutions. In addition, this report will specifically address IgE-mediated FA, but much of the practical guidance provided applies across the allergic disease spectrum. Finally, in this report, we discuss the integration of mental health professionals into the current FA management and treatment landscape; these considerations can and should be applied to future FA treatments, which will present families with new options and decision points.

WHO CAN BENEFIT FROM FOOD ALLERGY−RELATED MENTAL HEALTH CARE?

When considering the role of mental health professionals in FA clinics, the Pediatric Psychosocial Preventative Health Model (PPPHM)[10] can provide a framework to conceptualize who would benefit from mental health services and how. In this model, the majority of families navigating chronic illness diagnoses are resilient yet still experience illness-related stress and distress, and benefit from mental health professionals empowering families to adaptively adjust to the condition(s) through the provision of information, support, and screening for more significant mental health concerns. Consistent with PPPHM, our conceptualization of the FA population at large is that not every patient managing FA needs traditional outpatient therapy focused on addressing mental health diagnoses. That said, all patients and caregivers would ideally be seen by a mental health professional with FA expertise soon after diagnosis to provide developmentally appropriate psychoeducation that teaches fundamental coping skills for living with FA and to determine if/when follow-up is needed. Further, ideally there would be opportunities to follow up with patients on these topics throughout the FA journey. This approach will help them develop the ability to balance necessary vigilance without engaging in excessive avoidance. Examples can include teaching children about their FA, teaching caregivers how to communicate with daycares/schools and other caregivers about FA management needs, problem-solving ways to ensure that patients have access to emergency medications, and navigating common feelings of difference or exclusion when allergens are part of social activities. This psychoeducation is useful not only at the onset of the diagnosis but throughout each developmental stage of patients' lives, as their understanding of FA, feelings about FA, and academic and social environments continuously change as they get older, and there is some evidence that FA-related quality of life may worsen as pediatric patients with FA get older.[11-13]

A second, smaller subset of patients in the PPPHM are patients/families who need targeted support: patients who experience acute illness-related distress and have some risk factors. These patients may benefit from short-term therapy. Examples can include brief, problem-focused interventions for specific aspects of FA management such as preparing for an OFC or coping with needle stick procedures. The third, smallest subset of patients in the PPPHM are patients with persistent or escalating distress and a large number of risk factors: patients who would benefit from long-term therapy. In the context of FA,

TABLE I. Situations when mental health counseling/therapy would be beneficial for patients with food allergy/caregivers

Patient or caregivers would benefit from additional food allergy psychoeducation
Patient or caregivers have difficulty coping with a new food allergy diagnosis
Caregivers experiences stress with solid food introduction related to food allergy or early allergen introduction
Patient or caregivers have difficulty coping with food allergy–related anxiety, and it affects daily functioning and willingness to engage in life experiences
Patient or caregivers have difficulty asserting food allergy needs outside of the home and would benefit from assistance to develop communication strategies and approaches
Caregiver has difficulty asserting food allergy needs with other caregivers
Patient experiences food allergy–related bullying
Caregiver has difficulty allowing for normal developmental needs of child
Caregiver needs assistance transitioning food allergy management to child or adolescent
Patient recently experienced an allergic reaction or anaphylaxis, and patient or caregiver experiences post-traumatic symptoms and/or expresses worry about future reactions
Patient experiences restrictive/selective eating due to food allergy
Patients who experience high levels of food allergy anxiety and worry relating to medical procedures such as oral food challenges and food allergy treatments such as immunotherapies (ie, oral, epicutaneous, or sublingual immunotherapy) and biologics
Food allergy–related concerns are a component of a broader mental health disorder, including a diagnosable mental health disorder

Adapted from Herbert et al.[9]

there are times when patients and families may be more likely to fall into one of these 2 subsets and need additional support, including postinitial diagnosis, after an allergic reaction, during developmental transitions, when undergoing OFCs, and at the onset of or during the course of FA treatment, including immunotherapy. See Table I for situations when mental health counseling or therapy would be beneficial for those diagnosed with or parenting a child with FA.[9]

While experiencing anticipatory anxiety (ie, anxious thoughts about upcoming events) is normal and expected when preparing for OFCs and FA treatments, high levels of anxiety can impact patient participation even among patients/families who are highly motivated to pursue these FA treatments (eg, anxiety about biologic injection pain). Therefore, some patients may benefit from sessions with an allergy-informed mental health professional to develop anxiety management strategies before these appointments or even during the FA treatment process.

Overall therapeutic goals focus on helping patients and families develop a relaxed readiness approach to living with FA.[14] This approach allows them to be appropriately vigilant and ready to act when needed while also effectively managing anxiety so that they have a good health-related quality of life.

WHAT TYPES OF MENTAL HEALTH TREATMENT ARE PROVIDED DURING THERAPY?

A variety of psychological approaches may be applied for treatment of individuals with FA, and many mental health professionals use validated mental health assessment tools to aid in diagnosis and monitor treatment progress. Some of these assessments are specific to FA. More general well-validated mental health assessments (eg, for symptoms of depression or anxiety) may also be beneficial, but they are not designed to specifically assess FA-specific situations and burdens. See Table II for a list of frequently used assessments. These assessments are not diagnostic tools and therefore could be used by providers who do not have a mental health background, although it would be prudent to review the parameters of their use and interpretation before FA practice implementation.

Cognitive-behavioral therapy (CBT) is a well-established, evidence-based treatment that incorporates cognitive and behavioral strategies for managing distress and is commonly used in FA treatment.[27] CBT can help individuals bring awareness to the connections among their thoughts, feelings, and behaviors while supporting the development of more helpful or adaptive thoughts. For patients and caregivers who experience FA-related anxiety, cognitive strategies may include reminding themselves of their FA management strategies (eg, reading food labels and telling others about their allergies).[28] In addition, CBT protocols often incorporate behavioral strategies (ie, graded exposures) by encouraging individuals to approach feared and frequently avoided situations (eg, attending social events and dining out) to promote confidence and self-efficacy. CBT with graded exposures can also be used to support individuals in preparing for procedures including skin prick testing, OFCs, injections, or other FA treatment. Allergen proximity challenges, a specific form of graded exposure in which the patient is exposed to and develops confidence being physically close to an allergen, can also be used to effectively reduce FA anxiety and improve quality of life.[29]

CBT can also be applied to individuals with FA-related depression, social isolation, or those experiencing bullying. Cognitive strategies may include challenging maladaptive thoughts (eg, that FAs make someone a burden or that others do not want them to attend social gatherings), whereas behavioral strategies may include behavioral activation (ie, increasing engagement in positive experiences and activities). Further, CBT often incorporates psychoeducation and relaxation training for stress reduction (eg, diaphragmatic breathing and visual imagery).

Patients with FA may have difficulties with eating, ranging from typical childhood selective eating to avoidant/restrictive food intake disorder (ARFID).[30,31] CBT with exposures is also an established treatment for feeding/eating difficulties.[32,33] For severe feeding problems consistent with ARFID, multidisciplinary intervention using CBT or behavioral therapy approaches represents the gold standard of care.[34] Multidisciplinary intervention may be particularly indicated when working to safely expand dietary variety, reducing reliance on supplemental nutritional sources (eg, feeding tube and nutritional formula), and/or in the presence of concerns about swallowing safety.

Additional mental health treatment approaches may involve parent- and family-based interventions. Treatment of anxiety can be helpful for caregivers who have significant anxiety about their child's FAs and caregivers who may overly restrict and/or limit access to activities due to FA fears. Caregivers of infants with newly diagnosed FAs may develop anxiety about ongoing solid food introductions.[3,35] A supportive and CBT-based approach with exposures (eg, food introductions) is often helpful with these families. Family interventions are also beneficial for concerns

TABLE II. Commonly used psychosocial assessments in the context of food allergy mental health treatment

Assessment	Brief description
Food Allergy Quality of Life—Parental Burden[15]	17-item questionnaire measuring caregiver burden associated with their child's food allergy
Food Allergy Quality of Life Questionnaires[16-18]	Questionnaires ranging from 10 to 30 items that assess food allergy–related quality of life by parental proxy reporting for younger children and self-reporting for older children and adults
Scale of Food Allergy Anxiety[19]	Short (14 items) and long (21 items) self-report and parent proxy questionnaires that assess child food allergy–related anxiety
Impairment Measure for Parental Food Allergy–Associated Anxiety and Coping Tool[20]	28-item questionnaire measuring caregiver anxiety related to their child's food allergy
Food Allergy Anxiety Scale[21]	15-item questionnaire measuring patient's food allergy-related anxiety
Worry About Food Allergy Questionnaire[22]	13-item measure of patient- and/or caregiver-reported food allergy anxiety
Food Allergy Self-Efficacy Scale[23]	21-item questionnaire assessing caregiver's confidence in managing their child's food allergy
PROMIS scales[24]	National Institutes of Health–created physical and mental health self-report and parent-proxy questionnaires available in 8-item short forms
Strengths and Difficulties Questionnaire[25]	25-item questionnaires that assess children and young people's mental health and well-being by self-report and parent proxy
Pica, ARFID, and Rumination Disorder Interview (PARDI-AR-Q)[26]	32-item self-report measure of the symptoms of ARFID

ARFID, Avoidant restrictive food intake disorder.

related to FA management and division of FA responsibility. It can be helpful to have developmentally appropriate conversations with children and adolescents about their role in their FA care and to support caregivers in allowing their child to gradually gain independence with management responsibilities (eg, carrying their own self-administered epinephrine devices).

Another evidence-based treatment, acceptance and commitment therapy (ACT), is a type of treatment that helps individuals develop psychological flexibility through accepting life circumstances and living their lives in accordance with their values.[36] ACT for FA may involve accepting FAs as a diagnosis and understanding that this diagnosis should not limit individuals in being able to live meaningful, value-driven lives. ACT can also support caregivers of children with FAs by encouraging them to accept life's circumstances while focusing on the present moment, evaluating what is important to them, and committing to pursuing important actions that are not determined by fear.

Finally, motivational interviewing (MI) is a treatment approach that promotes behavior change.[37] MI may be used to support individuals in adhering to FA management strategies. MI may also be used to explore motivation to complete recommended allergy testing, treatment, or medical appointment follow-through. MI can also be effectively used by any member of the health care team during routine care, with training in this approach.

WHAT MODELS OF MENTAL HEALTH CARE INTEGRATION COULD BE CONSIDERED?

There are multiple models for delivering mental health care to patients with FA. To date, there is no research assessing whether any one model is superior; each may provide unique benefits or drawbacks. Many FA practices use a combination of these models. For example, within one FA practice, mental health care services could be offered via consultation-liaison during OFC clinics, during multidisciplinary eosinophilic esophagitis clinics, and in an outpatient therapy setting. See Table III for an overview of each model.

Consultation-liaison

Services provided in this model occur when the mental health provider is available during standard FA medical visits or specialty clinic appointments (eg, OFC clinic) and can provide care to (1) all patients with FA who present for appointments or (2) those patients with FA who are identified as having a specific mental health need. If the approach is to meet with all patients with FA, mental health professionals may use mental health assessment screening tools to assess functioning and identify areas of focus. These visits can also be an opportunity to talk to families about general FA management practices, provide psychoeducation about the psychosocial impact of FA, and review available resources. When meeting with patients who have identified mental health needs within a consultation setting, mental health professionals typically provide brief, targeted assessment and intervention services to support specific FA needs. Some examples may include procedural support (eg, allergy testing, OFCs, and oral immunotherapy [OIT] doses), shared decision-making about treatment options (eg, OIT, omalizumab, and allergen immunotherapy), or assistance with needle phobia. When available, other allied health professionals such as child life specialists can also be helpful with procedural support such as allergy testing and OFCs. These visits may also be focused on more specific mental health concerns such as stress, anxiety, or depressive symptoms that lead to a referral for outpatient therapy. Consultation-liaison models allow the opportunity for mental health providers to work collaboratively with medical colleagues, reach an array of families, and identify those who would benefit from further mental health support.

Multidisciplinary team visits

This model is characterized by the inclusion of mental health care in an integrated care model, meaning that the mental health provider's focus is on treating patients with specific medical conditions collaboratively with other specialty providers. In this model, patients are scheduled for multiple visits (eg, medical,

TABLE III. Mental health care integration models

Model	Consultation-liaison	Multidisciplinary team	Psychotherapy referrals
Location	• Embedded in medical clinics	• Embedded in medical clinics	• Within the food allergy clinic/ institution • In the community such as private practice Telehealth
Who is seen	• May meet with all patients or as needed	• Meet with all patients	• Referred patients
Services	• Brief "real time" coping support Psychosocial assessment screeners • Early identification of mental health support needs • Educational, early intervention resources	• Brief, health-focused interventions Psychosocial assessment screeners • Early identification of mental health support needs • Educational, early intervention resources	• Brief or long-term psychological interventions such as cognitive-behavioral therapy, acceptance and commitment therapy, or motivational interviewing
Billing*	• Mental health therapy codes • Medical codes (Health and Behavior codes)	• Mental health therapy codes • Medical codes (Health and Behavior codes)	• Mental health therapy codes • Medical codes (Health and Behavior codes)
Benefits	• Opportunity for "real time" coping support • Shared decision-making regarding treatment options • Discussion with families about general food allergy management, psychoeducation about stress, anxiety, and depressive symptoms and address any concerns they have related to psychosocial adjustment Warm hand-offs for patients/families who may benefit from additional support/ psychotherapy • Meaningful and normalizing approach to engage psychology providers as part of the treatment team • Offers team-based, collaborative work; can both identify needs for psychology referrals and reduce the number of unnecessary referrals when brief interventions are satisfactory	• Mental health care is integrated into medical care, which can increase acceptability and accessibility, validate and normalize families' psychosocial concerns, and reduce family burden around scheduling multiple specialty appointments • Mental health experts may also work closely with dietitians/nutritionists who counsel patients who exhibit symptoms of avoidant-restrictive food intake disorders or other food aversions, which is essential to support the nutritional health of the patient • Multidisciplinary teams allow for provider collaboration and coordinated team recommendations and feedback, tailored for each patient/family • May include initial team evaluation only and/or follow-up visits • Mental health involvement can help promote use of a biopsychosocial model to identify risk and resilience factors that may affect family coping with food allergy	• Individualized treatment for a sustained period of time to address moderate to severe mental health needs • Telemedicine visits may increase access to psychotherapy for patients for whom repeated travel to a medical center may be burdensome
Drawbacks	• Potential disruption to clinic flow and lack of space • May not be billable to insurance	• Limited number of multidisciplinary clinics throughout the United States Visits can be lengthy for families due to meeting with multiple medical providers during appointments • Patients may perceive that the cost of these appointments is too high because they are billed by multiple providers in one day	• Additional cost above and beyond routine allergy care • Not all community providers accept health insurance • Time and other indirect costs for additional appointments

*Specific billing code coverage will vary by state and insurance.

mental health, and dietician) concurrently to address management of a specific medical condition (eg, eosinophilic esophagitis and food protein–induced enterocolitis) or engage in a specific treatment (eg, OIT), and all patients meet with a provider from each discipline. Multidisciplinary teams allow providers to discuss their recommendations and feedback as a group, considering multiple perspectives and tailoring treatment for each patient/family based on their unique needs. It eliminates the need for the patient to attend separate visits for each service and reduces challenges with communication among care teams.

Psychotherapy referrals

Psychotherapy referrals for mental health involve a medical provider referring a patient to a mental health provider, either colocated at the same site as the FA clinic or at a separate location (eg, community mental health provider) for outpatient therapy services. Mental health providers working in this capacity offer assessment and therapy services independent of FA medical visits and may work individually with the patient, with caregivers of patients with FA, or with the larger family unit based on the presenting concerns. Referrals to these providers can include those who specialize in supporting the mental health needs of patients with the specific illness or those who provide more generalized mental health care, depending on availability within the medical provider's area. If the patient has mental health needs specific to their illness, a specialized provider is typically preferred when available. Psychotherapy services may be brief and targeted or long-term, based on the needs of the patient; they may also be in-

TABLE IV. Referral resources

Resource	Website, if applicable
The Food Allergy Counseling Directory via the Academy of Food Allergy Counseling	https://www.FoodAllergyCounseling.org/Directory
Psychology Today	https://www.psychologytoday.com
Anxiety & Depression Association of America	https://adaa.org/
Association for Behavioral and Cognitive Therapies	https://www.abct.org/
Local state psychological associations	Example: https://www.marylandpsychology.org
Insurance company	Example: https://www.aetna.com/individuals-families/find-a-doctor.html
Referral from PCP/medical provider	
Word of mouth from local food allergy support groups	

PCP, primary care physician.

person or provided through telehealth if a provider is licensed in the state where the patient is located.

HOW ARE MENTAL HEALTH TREATMENT SERVICES BILLED?

Services provided by licensed mental health professionals are typically billable to patient insurance plans, although coverage will vary by the insurance plan's coverage (eg, copayments and deductibles). Mental health diagnostic codes are frequently used to bill for mental health services. However, some insurance companies cover Health and Behavior codes, which permit mental health professionals to bill for services using physical health diagnostic codes (ie, FA and eczema).[38] These codes can be used for services that address behavioral and social concerns related to treatment or management of physical health problems such as FA. Within both mental health and Health and Behavior codes, services can be billed for individual, family, or parent-only interventions.

A variety of financial models have been implemented to support mental health integration within medical clinics or as part of a hospital system. In addition to insurance billing, these include support through philanthropic sources and grant funding. Funding outside of direct insurance billing allows mental health professionals to provide a broader array of services to support patients, families, and medical colleagues that are not billable to insurance. These include opportunities for brief interventions (eg, learning a relaxation strategy), warm handoffs during medical clinics, procedural support (eg, intervention for an anxious child during skin prick testing), curbside consultations with the medical team, teaching/supervising mental health and/or medical staff, and quality improvement initiatives.

WHAT ARE THE DIFFERENT TYPES OF MENTAL HEALTH PROFESSIONALS AND HOW DO I FIND ONE?

Mental health professionals can hold different licenses. Although the licenses are different, each of these mental health clinicians provides therapy and support to those dealing with concerns affecting mental health and daily functioning. Specific types of mental health professionals include clinical psychologists (PhD, PsyD, and EdD), licensed clinical professional counselors (LCPC, LPC), licensed clinical social workers (LCSW), and licensed marriage and family therapists (LMFT). Licensed mental health professionals obtain graduate degrees in their area of study, are regulated by both their professional organizations and state licensing boards, and are required to complete thousands of hours of clinical practice before becoming fully licensed. Psychologists obtain doctorate degrees, whereas other mental health professionals typically obtain master's degrees.

In FA clinics located in an academic institution, allergists can reach out to psychologists, social workers, or other mental health professionals for consultations within their institution. For clinics with multidisciplinary teams, it is beneficial to incorporate mental health professionals into the initial appointment, as it opens the door for coordination of ongoing mental health services, if needed. When possible, it is often helpful to have someone from the FA clinic make a warm referral to assist patients in identifying and navigating potential barriers to care, such as providing them with instructions for how to find a mental health professional in their insurance network. In FA private practices, allergists and health care practitioners can refer to licensed mental health professionals through direct referrals or by recommending that patients locate and follow up with a mental health professional. In addition, some FA private practices have developed direct partnerships with FA-informed mental health therapists in their state, by having them consult with their patients at the onset of treatment so that patients can reach out for mental health services if needed.

Regardless of the practice setting, when referring patients with FA for mental health support, it is optimal to refer to identified mental health professionals with specific training and experience in working with FA or to those who have access to consultation/supervision from a mental health professional with this knowledge. However, locating a professional in close proximity to patients can be a challenge given that specialization in psychological treatment for FA is still a developing niche in the mental health field. The Food Allergy Counseling Directory (www.foodallergycounseling.org/directory) is a resource to help families locate FA-informed therapists. In the absence of FA-informed therapists in the area or state, providers should refer patients to therapists who focus on health anxiety and chronic illness. See Table IV for referral resources and Table V for a list of resources that can be used in any FA clinic to support coping and adjustment.

Another factor to consider when referring patients for mental health support is current licensing laws, which require that patients must physically be in a state in which the mental health professional is licensed in order to receive therapy services.

TABLE V. Patient and family resources

Children's books
• *Humphrey the Bee Has a Food Allergy* by Alison Grace Johansen
• *The Princess and the Peanut Allergy* by Wendy McClure
• *Daniel Has an Allergy* by Daniel Tiger's Neighborhood
• *The Bugabees: Friends with Food Allergy* by Amy Recob
• *The Class That Can: Food Allergies* by JJ Vulopas and Riya Jain
• *Zippy: A Story About Oral Immunotherapy for Food Allergies* by Dr Sakina Bajowala
• *Wally the Seafood Allergic Walrus* by Dr. Alice Hoyt
• *Mighty Jax and the Cookie Surprise* and *Mighty Jax and the Teal Pumpkin Surprise* by Laurie Margolis
• *A Kids Book About Food Allergies* by Ina K. Chung
• *Charlie Learns About Her Food Allergies* by Katie Holl
• *Food Allergies Don't Stop Me!* By Bumble Bee Betty
• *Allergic: A Graphic Novel* by Megan Wagner Lloyd and Michelle Mee Nutter
• *Bullying Leaves A Bad Taste: Anti-Bullying Initiative For Kids and Teens with Food Allergies* by Abigail B. Glick, MD
• *Not Today, Butterflies! A Book About Food Allergy Anxiety* by Nicole Ondatje
• *My Year of Epic Rock* by Andrea Pyros
Children's TV shows
• Daniel Has an Allergy—Daniel Tiger's Neighborhood; PBS; season 3, episode 4 Arthur—Binky Goes Nuts—Arthur; PBS; season 9; episode 10
Children's music
• Kyle Dine: https://www.kyledine.com/
Books and magazines for emerging adults, adults with food allergy, and parents
• Studying Abroad with Food Allergies by Morgan Smith
• The Food Allergy Experience by Ruchi Gupta and Denise Bunning
• Food Allergies: A Complete Guide For Eating When Your Life Depends On It by Scott Sicherer
• Food Without Fear by Ruchi Gupta
• The Complete Guide to Food Allergies in Adults and Children by Scott Sicherer
• Allergic Living magazine
• May Contain Anxiety: Managing the Overwhelm of Parenting Children with Food Allergies by Tamara Hubbard, MA, LCPC (out in September 2025)
• Beyond the Allergy Diagnosis: A Guide to Navigating and Understanding the Emotional and Psychological Phases of Allergies by Simone Albert
Handouts for parents and families
• Food allergy stages handouts (AAAAI): https://www.aaaai.org/foodallergystages
• *Living Confidently with Food Allergy* handbook: https://www.allergyhome.org/handbook
• Anxiety management toolkit*
Websites
• Food Allergy Research & Education (FARE): https://www.foodallergy.org
• Center for Food Allergy and Asthma Research (CFAAR) videos: https://www.feinberg.northwestern.edu/sites/cfaar/
• Food Allergy & Anaphylaxis Connection Team (FAACT): https://www.foodallergyawareness.org
• Allergy & Asthma Network (AAN): https://allergyasthmanetwork.org
• Kids with Food Allergies: https://www.kidswithfoodallergies.org
Apps
• Spokin
• Equal Eats—travel translation cards
• Yummly Recipes and Cooking Tools
• Eat! Gluten-Free
• ShopWell—Better Food Choices
• Fig
• AllergyEats

AAAAI, American Academy of Allergy, Asthma & Immunology; *PBS*, Public Broadcasting Service.
*AAAAI project in development.

Therefore, patients need to locate mental health professionals in their state (or one who is licensed or approved to work in their state), even when engaging in telehealth therapy. Alternatively, patients could travel to a neighboring state for a telehealth visit if the mental health professional is licensed or approved to provide telehealth services in that neighboring state. To help with availability and continuity of care, professional organizations have been developing interstate compacts that allow licensed therapists to offer services in multiple states. These compacts will help those managing FAs have easier access to FA-informed therapists.

- The American Psychological Association's PsyPact is an interstate agreement that allows qualifying psychologists to practice psychology in 42 states as of January 2025. An up-to-date PsyPact state map can be accessed at: https://psypact.gov/page/psypactmap
- The American Counseling Association's Interstate Counseling Compact is set to start granting privileges to qualifying counselors to practice in 37 states in 2025. An up-to-date Interstate Counseling Compact state map can be accessed at: https://www.counseling.org/advocacy/counseling-compact
- The National Association of Social Worker's Social Work Compact is still in development, with a goal of becoming active within the next 1 to 2 years.

HOW CAN MENTAL HEALTH PROFESSIONAL TRAINEES BE INCLUDED IN FOOD ALLERGY CARE?

The inclusion of mental health professional trainees in clinical care of patients with FA provides dual benefit of increased access to mental health support for families and expert-supervised training opportunities to promote the development of future mental health professionals to support a condition for which the prevalence is increasing.[39] Although some trainees may have specific FA interest or background, trainees with broader interest in areas such as coping with medical conditions, preparing for procedures, child/caregiver anxiety, treatment adherence/self-management, feeding/eating difficulties, and interprofessional collaboration may all benefit from gaining clinical experience in allergy clinics. At various stages of training, learners will benefit from opportunities to observe, co-lead, and lead evaluations and interventions under supervision. At advanced training levels (eg, postdoctoral fellows), inclusion of trainees in allergy care provides opportunities to participate in supervised program and intervention development while supporting expansion of clinical care. Mental health graduate programs and licensing boards are degree- and profession-specific, and each has requirements for supervised clinical practice at various stages of professional training. Requirements may also vary by state and country. As such, mental health professionals with formal FA training and expertise should serve as primary supervisors when possible. In addition, trainee shadowing of allergy medical team members during clinical visits and observing FA procedures and treatments allows for enhanced understanding of FA, management guidelines, and the patient/family experience. Importantly, even mental health trainees who do not go on to specialize in the area of allergic conditions are quite likely to encounter patients with FA in their clinical practice and will be better equipped to address common psychosocial concerns. Finally, FA training is available for currently licensed mental health professionals who wish to work with patients with FA and families. At present, FA-focused educational programs that include mental health content are offered for allied health professionals (and in some cases, also physicians) by FA organizations in the United States (American Academy of Allergy, Asthma & Immunology; American College of Allergy, Asthma, and Immunology, Food Allergy Research & Education), Canada (Canadian Society of Allergy and Clinical Immunology), the United Kingdom (Allergy UK), and Australia (Australasian Society of Clinical Immunology and Allergy). Other countries may similarly offer such educational programming.

HOW CAN MENTAL HEALTH PROFESSIONALS BE INCLUDED IN FOOD ALLERGY–RELATED MEDICAL EDUCATION?

Mental health professionals may also play an important role in medical and interprofessional education. This may include teaching/didactic lectures on topics such as mental health aspects of FA management at different developmental stages, strategies to enhance patient and caregiver self-efficacy around FA self-management, and effective strategies for screening for mental health concerns in allergy visits. Within multidisciplinary clinics, there may also be opportunities for medical students, residents, and allergy fellows to observe sessions with the mental health professional to enhance the understanding of the mental health impact of FAs and strategies to support patients and families. Likewise, mental health professionals benefit from inclusion in interdisciplinary learning opportunities, to support collective learning and exchange of ideas across disciplines.

HOW CAN MENTAL HEALTH PROFESSIONALS CONTRIBUTE TO FOOD ALLERGY RESEARCH?

Quality of life, which is a patient-reported outcome, was identified as one of only 2 critical core outcomes in a global study of core FA outcomes.[40] Mental health professionals are well positioned to contribute to and lead research projects within allergy practices. Clinical psychologists are trained in research design and methods, psychometrics, and statistics. Profession-wide competencies include the application of scientific methods to evaluate practices, interventions, and programs. FA mental health research may address a variety of topics, including understanding FA's mental health burden, evaluation of mental health outcomes for new FA treatments, validation of screening and assessment tools, engaging community partners in intervention development (eg, creating community advisory boards), and development and evaluation of mental health interventions to address key outcomes (eg, anxiety, quality of life, food introduction, adherence, and FA self-efficacy). Psychologists may also lead clinical trials of behavioral interventions. In addition, mental health professionals can be important partners to researchers who are developing and evaluating new FA medical treatments by providing expertise regarding patient-reported outcomes, mixed methods research (ie, quantitative and qualitative research), behavioral aspects of medical treatments that may impact their effectiveness and/or implementation (eg, adherence), and health disparities. Further, mental health professionals receive substantial training in cultural humility and health disparities and can be crucial partners in ensuring that FA research is inclusive of all patients with FA. See Table VI for further delineation of research projects that may be led by or could include mental health professionals.

SUMMARY

Many patients with FA and their caregivers need and express a desire for FA-related mental health support, yet it is rare for mental health professionals to be included in FA clinics. This document provides a guide for FA providers who wish to integrate mental health professionals in their FA clinics, including details regarding evidence-based mental health treatment and which patients with FA can benefit, models of mental health care integration and billing, and additional ways that mental health professionals can enhance FA clinics such as

TABLE VI. Mental health professionals as researchers

Type of research	Purpose	Recent example
Patient-reported or medical outcomes (observational)	Examine patient-reported outcomes using surveys or gather medical outcomes from electronic health records	Cooke et al[41] conducted a cross-sectional study to investigate bullying of youth 9-15 years old with food allergies and to examine parent-child agreement on bullying experiences
Intervention development	Use rigorous methods to develop and determine the effectiveness of interventions aimed at improving food allergy–related outcomes	Jandasek et al[42] described methods of designing and evaluating an interactive educational software program for school-aged children with food allergies
Qualitative assessments	Conduct interviews or focus groups to elucidate themes, experiences, and perspectives of youth and their families beyond what can be captured using questionnaires	Hurst et al[43] conducted interviews with parents of children with food allergies to compare the food allergy–related social and financial experiences of families considered economically advantaged or disadvantaged
Mixed methods research*	Integrate quantitative data and qualitative data to better understand food allergy experiences, especially experiences that are not yet well understood or captured by existing quantitative measures, and inform the development of new measures and interventions	Ramos et al[44] used validated general and food allergy–related questionnaires and qualitative interviews to evaluate a food allergy parent mentoring program for caregivers of young children with food allergy
Psychosocial functioning within the context of medical treatments/interventions	Investigate the role of psychosocial functioning (eg, anxiety) in completing testing, treatments, or interventions, or changes in functioning before and after treatments	LeBovidge et al[45] examined psychological benefits and burden associated with oral immunotherapy
Implementation of treatments/interventions	Examine the uptake of food allergy treatments and/or the efficacy of food allergy treatments/interventions when implemented in real-world settings	DunnGalvin et al[46] profiled the families who were enrolled in allergy immunotherapy clinical trials
Health disparities	Examine disparities in food allergy medical outcomes, health care utilization, access, psychosocial functioning, and other domains	Herbert et al[47] examined racial differences in the psychosocial impact of pediatric food allergy
Patient education and resources development	Develop patient education resources to improve clinical practice and/or research	LeBovidge et al[48] developed the Ages and Stages Educational Handouts as part of the American Academy of Allergy, Asthma & Immunology Adverse Reactions to Food Committee
Measure development	Develop and examine the reliability and validity of measures aimed at capturing patient or family outcomes	Dahlsgaard et al[19] tested the validity and reliability of the Scales of Food Allergy Anxiety

All articles included a mental health professional as an author.
*The integration of quantitative data and qualitative information.

through psychology and medical trainee education and research. Including mental health professionals in FA clinics can be an important step toward holistically addressing the needs of patients with FA and their caregivers and supporting patient and family well-being.

REFERENCES

1. Bilaver LA, Sharma HP, Gupta RS, Herbert LJ, Marchisotto MJ, Aktas ON, et al. Food allergy research priorities: results from a patient-centered study. J Allergy Clin Immunol Pract 2019;7:2431-3.e4.
2. Golding MA, Batac ALR, Gunnarsson NV, Ahlstedt S, Middelveld R, Protudjer JLP. The burden of food allergy on children and teens: a systematic review. Pediatr Allergy Immunol 2022;33:e13743.
3. Golding MA, Gunnarsson NV, Middelveld R, Ahlstedt S, Protudjer JLP. A scoping review of the caregiver burden of pediatric food allergy. Ann Allergy Asthma Immunol 2021;127:536-47.e3.
4. Bird JA, Groetch M, Allen KJ, Bock SA, Leonard S, Nowak-Wegrzyn AH, et al. Conducting an oral food challenge to peanut in an infant. J Allergy Clin Immunol Pract 2017;5:301-11.e1.
5. Herbert LJ, Marchisotto MJ, Sharma H, Gupta RS, Bilaver LA. Availability of mental health services for patients with food allergy. J Allergy Clin Immunol Pract 2019;7:2904-5.
6. Young-Hyman D, De Groot M, Hill-Briggs F, Gonzalez JS, Hood K, Peyrot M. Psychosocial care for people with diabetes: a position statement of the American diabetes association. Diabetes Care 2016;39:2126-40.
7. Mattie Miracle Cancer Foundation. Creating standards for psychosocial care for children with cancer and their families. Accessed February 12, 2025. https://www.mattiemiracle.com/standards
8. Herbert L, DunnGalvin A. Psychotherapeutic treatment for psychosocial concerns related to food allergy: current treatment approaches and unmet needs. J Allergy Clin Immunol Pract 2021;9:101-8.
9. Herbert L, Shemesh E, Bender B. Clinical management of psychosocial concerns related to food allergy. J Allergy Clin Immunol Pract 2016;4:205-13.

10. Kazak AE. Pediatric Psychosocial Preventative Health Model (PPPHM): research, practice, and collaboration in pediatric family systems medicine. Fam Sys Health 2006;24:381-95.
11. DunnGalvin A, Koman E, Raver E, Frome H, Adams M, Keena A, et al. An examination of the Food Allergy Quality of Life Questionnaire performance in a countrywide American sample of children: cross-cultural differences in age and impact in the United States and Europe. J Allergy Clin Immunol Pract 2017;5:363-8.e2.
12. Miller J, Blackman AC, Wang HT, Anvari S, Joseph M, Davis CM, et al. Quality of life in food allergic children: results from 174 quality-of-life patient questionnaires. Ann Allergy Asthma Immunol 2020;124:379-84.
13. Kubala SA, Young FD, Callier V, Rasooly MM, Dempsey C, Brittain E, et al. Key factors that influence quality of life in patients with IgE-mediated food allergy vary by age. Allergy 2024;79:2812-25.
14. Warren CM, Otto AK, Walkner MM, Gupta RS. Quality of life among food allergic patients and their caregivers. Curr Allergy Asthma Rep 2016;16:38.
15. Cohen BL, Noone S, Munoz-Furlong A, Sicherer SH. Development of a questionnaire to measure quality of life in families with a child with food allergy. J Allergy Clin Immunol 2004;114:1159-63.
16. Flokstra-de Blok BMJ, DunnGalvin A, Vlieg-Boerstra BJ, Oude Elberink JNG, Duiverman EJ, Hourihane JO, et al. Development and validation of the self-administered Food Allergy Quality of Life Questionnaire for adolescents. J Allergy Clin Immunol 2008;122:139-44.
17. Flokstra-de Blok BM, DunnGalvin A, Vlieg-Boerstra BJ, Oude Elberink JNG, Duiverman EJ, Hourihane JO, et al. Development and validation of a self-administered Food Allergy Quality of Life Questionnaire for children. Clin Exp Allergy 2009;39:127-37.
18. Flokstra-de Blok BM, van der Meulen GN, DunnGalvin A, Vlieg-Boerstra BJ, Oude Elberink JNG, Duiverman EJ, et al. Development and validation of the Food Allergy Quality of Life Questionnaire—Adult Form. Allergy 2009;64:1209-17.
19. Dahlsgaard KK, Wilkey LK, Stites SD, Lewis MO, Spergel JM. Development of the Child- and Parent-Rated Scales of Food Allergy Anxiety (SOFAA). J Allergy Clin Immunol Pract 2022;10:161-9.e6.
20. To S, Westwell-Roper C, Soller L, Stewart SE, Chan ES. Development of IMPAACT (Impairment Measure for Parental Food Allergy-Associated Anxiety and Coping Tool), a validated tool to screen for food allergy-associated parental anxiety. Ann Allergy Asthma Immunol 2022;129:451-60.e3.
21. Coelho GLH, Byrne A, Hourihane J, DunnGalvin A. Development of the Food Allergy Anxiety Scale in an adult population: psychometric parameters and convergent validity. J Allergy Clin Immunol Pract 2021;9:3452-8.e1.
22. Poehacker S, McLaughlin A, Humiston T, Peterson C. Assessing parental anxiety in pediatric food allergy: development of the Worry About Food Allergy Questionnaire. J Clin Psychol Med Settings 2021;28:447-56.
23. Knibb RC, Barnes C, Stalker C. Parental confidence in managing food allergy: development and validation of the Food Allergy Self-Efficacy Scale for Parents (FASE-P). Clin Exp Allergy 2015;45:1681-9.
24. National Institutes of Health. PROMIS® (Patient-Reported Outcomes Measurement Information System). Accessed February 12, 2025. https://www.healthmeasures.net/explore-measurement-systems/promis
25. Goodman R. The strengths and difficulties questionnaire: a research note. J Child Psychol Psychiatry 1997;38:581-6.
26. Bryant-Waugh R, Micali N, Cooke L, Lawson EA, Eddy KT, Thomas JJ. Development of the Pica, ARFID, and Rumination Disorder Interview, a multi-informant, semi-structured interview of feeding disorders across the lifespan: a pilot study for ages 10−22. Int J Eat Disord 2019;52:378-87.
27. Knibb RC, Jones CJ, Herbert LJ, Screti C. Psychological support needs for children with food allergy and their families: a systematic review. Pediatr Allergy Immunol 2024;35:e14108.
28. Knibb RC. Effectiveness of cognitive behaviour therapy for mothers of children with food allergy: a case series. Healthcare (Basel) 2015;3:1194-211.
29. Proctor KB, Ramos AM, Herbert LJ. "The peanut butter didn't attack me": food allergen proximity challenges to improve quality of life. Ann Allergy Asthma Immunol 2023;131:9-10.
30. Patrawala MM, Vickery BP, Proctor KB, Scahill L, Stubbs KH, Sharp WG. Avoidant-restrictive food intake disorder (ARFID): a treatable complication of food allergy. J Allergy Clin Immunol Pract 2022;10:326-8.e2.
31. Hill S, Nurmatov U, DunnGalvin A, Reese I, Vieira MC, Rommel N, et al. Feeding difficulties in children with food allergies: an EAACI Task Force Report. Pediatr Allergy Immunol 2024;35:e14119.
32. Thomas JJ, Wons OB, Eddy KT. Cognitive-behavioral treatment of avoidant/restrictive food intake disorder. Curr Opin Psychiatry 2018;31:425-30.
33. Willmott E, Dickinson R, Hall C, Sadokovic K, Wadhera E, Micali N, et al. A scoping review of psychological interventions and outcomes for avoidant and restrictive food intake disorder (ARFID). Int J Eat Disord 2024;57:27-61.
34. Sharp WG, Volkert VM, Scahill L, McCracken CE, McElhanon B. A systematic review and meta-analysis of intensive multidisciplinary intervention for pediatric feeding disorders: how standard is the standard of care? J Pediatr 2017;181:116-24.
35. Westwell-Roper C, To S, Andjelic G, Lu C, Lin B, Soller L, et al. Food-allergy-specific anxiety and distress in parents of children with food allergy: a systematic review. Pediatr Allergy Immunol 2022;33:e13695.
36. Dindo L, Van Liew JR, Arch JJ. Acceptance and commitment therapy: a transdiagnostic behavioral intervention for mental health and medical conditions. Neurotherapeutics 2017;14:546-53.
37. Gayes LA, Steele RG. A meta-analysis of motivational interviewing interventions for pediatric health behavior change. J Consult Clin Psychol 2014;82:521-35.
38. American Psychological Association. Health behavior assessment and intervention services. Accessed February 12, 2025. https://www.apaservices.org/practice/reimbursement/health-codes/health-behavior
39. Bartha I, Almulhem N, Santos AF. Feast for thought: a comprehensive review of food allergy 2021-2023. J Allergy Clin Immunol 2024;153:576-94.
40. Demidova A, Drewitz KP, Kimkool P, Bankanin N, Barzylovich V, Botjes E, et al. Core outcome set for IgE-mediated food allergy clinical trials and observational studies of interventions: international Delphi consensus study 'COMFA.'. Allergy 2024;79:977-89.
41. Cooke F, Ramos A, Herbert LJ. Food allergy-related bullying among children and adolescents. J Pediatr Psychol 2022;47:318-26.
42. Jandasek BN, Kopel SJ, Esteban CA, Rudders SA, Spitalnick JS, Larsen MA, et al. Friends, family, and food: development of a food allergy intervention, F3-App, for children. Clin Pract Pediatr Psychol 2024;12:143-56.
43. Hurst K, Gerdts J, Simons E, Abrams EM, Protudjer JLP. Social and financial impacts of food allergy on the economically disadvantaged and advantaged families: a qualitative interview study. Ann Allergy Asthma Immunol 2021;127:243-8.
44. Ramos A, Cooke F, Miller E, Herbert L. The food allergy parent mentoring program: a pilot intervention. J Pediatr Psychol 2021;46:856-65.
45. LeBovidge JS, Haskell S, Olney EK, Hoyte L, Rachid R, Nadeau KC, et al. The psychological impact of oral immunotherapy for children with food allergy: perceived benefits and treatment burden. Clin Pract Pediatr Psychol 2014;2:13-26.
46. DunnGalvin A, Chang WC, Laubach S, Steele PH, Dubois AEJ, Burks AW, et al. Profiling families enrolled in food allergy immunotherapy studies. Pediatrics 2009;124:e503-9.
47. Herbert L, Ramos A, Robinson A, Coleman A, Abdikarim I, Sharma H, et al. Examining racial differences in food allergy-related psychosocial outcomes. J Allergy Clin Immunol 2020;145(Suppl):AB225.
48. LeBovidge JS, Herbert LJ, Ramos A, Rotter N, Sicherer SH, Young MC, et al. The development of age-based food allergy educational handouts for caregivers and patients: a Work Group Report of the AAAAI Adverse Reactions to Foods Committee. J Allergy Clin Immunol Pract 2022;10:2552-8.