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## An Open Trial of the Anxiety Action Plan (AxAP): A Brief Pediatrician-Delivered Intervention for Anxious Youth

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### Abstract

**Background**—Anxiety disorders in youth are among the most common psychiatric disorders, yet the majority of affected youth do not receive treatment. One approach to improving access to care is identification and intervention within the primary care setting.

**Objective**—This manuscript presents data from a single group pre-post open trial of the *Anxiety Action Plan (AxAP)*, a brief pediatrician-delivered intervention to reduce anxiety in youth who present in the primary care setting.

**Methods**—Eleven pediatricians conducted the intervention with 25 youth (mean age 11.16 years; range 6-18 years) with elevated levels of anxiety in their primary care practice setting.

**Results**—Pediatricians' ratings of the *AxAP* training were positive (mean overall satisfaction was 4.82 on 5 point scale). Pediatricians and parents also reported high levels of intervention satisfaction and acceptability. Parents (but not children) who completed the intervention reported significant reductions from pre- to post-intervention on measures of child anxiety severity, impairment, and caregiver burden (Cohen's *d* 1.06, .75, .60, respectively).

**Conclusions**—Findings suggest that a brief, pediatrician-delivered intervention in primary care settings appears feasible and beneficial to patients. Additional controlled evaluation of the intervention's efficacy is needed.

Pediatric anxiety disorders are among the most common psychiatric disorders and severely impair the daily functioning of youth and their families (Costello et al., 2003; Langley et al., 2004; Wood 2006). Pediatric anxiety disorders are also persistent and increase the likelihood of adult anxiety disorders and related impairment (Breslau et al., 2008; Kendall et al., 2004). Thus, early identification and intervention can reduce both current suffering and long-term disability. Unfortunately, less than half of anxious youth receive treatment (Essau et al., 2000). In one large scale study ( $n = 714$ ) conducted in a primary care setting, approximately 20% of youth had clinical levels of anxiety, and 10% met full diagnostic criteria for an

anxiety disorder, but only 31% of those with an anxiety disorder reported receiving treatment (Chavira et al., 2004). These data were in sharp contrast to youth diagnosed with attention deficit hyperactivity disorder (ADHD), a condition which affects fewer youth but for which almost 80% of youth reportedly received treatment (Chavira et al., 2004).

To address the gap in mental health services received by youth, there has been a concerted effort to enhance access to evidence-based interventions. One approach has been to increase options for accessing mental health interventions in primary care settings. Indeed, pediatricians are being called on to assess and treat psychiatric illnesses. For instance, the American Academy of Pediatrics (AAP) is advocating that pediatric healthcare providers adopt an expanded role that makes identifying and treating mental health problems in youth a priority and cites identifying and treating childhood anxiety disorders specifically as a top priority (AAP, 2004). The AAP has also offered tools and training in mental health to better support pediatricians in this mission (e.g., Bright Futures).

Pediatric primary care settings are ideal for implementing systematic assessment and intervention for anxiety specifically because a hallmark feature of anxiety disorders is somatic complaints. Indeed, over 90% of youth with anxiety disorders report at least one somatic symptom such as headaches, stomachaches, palpitations, muscle tension, sweating, and trembling/shaking (Campo & Fritsch 1994; Garber et al., 1991; Ginsburg et al., 2006). Conversely, youth with frequent somatic complaints are four times as likely to screen positively for anxiety and depression compared to their peers without somatic complaints (Campo et al., 1999; Meesters et al., 2003). Thus, enhancing the ability of primary care providers to identify and intervene more effectively with these youths, with appropriate brief, evidence-based interventions, may curtail the clinical and economic costs associated with these untreated disorders and improve access to care.

To date, efforts to reduce anxiety in primary care settings have focused on using mental health care specialists or nurses, and interventions have generally employed cognitive behavioral therapy (CBT) strategies over seven or more sessions, with the exception of bibliotherapy interventions which are shorter in duration (Chavira et al., 2014; Kozłowski, Lusk, & Melnyk, 2015). The small number of published studies evaluating interventions aimed at reducing pediatric anxiety in primary care settings have reported positive findings, with response rates between 34 and 75% (Chavira et al., 2014; Creswell et al., 2010; Kolko et al., 2010; McGrath et al., 2011; Thirlwall et al., 2013; Warner et al., 2011).

The current study, funded by the National Institute of Mental Health and conducted under the auspices of the *Center for Mental Health in Pediatric Primary Care* at The Johns Hopkins University Bloomberg School of Public Health, reports feasibility and preliminary outcome data on an intervention designed to enhance the capacity of pediatricians to reduce their patients' anxiety. Specifically, this paper includes data on: 1) pediatricians' evaluation of the training in the *Anxiety Action Plan (AxAP)*, 2) pediatrician and parent-reports on the feasibility and acceptability of using the intervention strategies, and 3) pre-post intervention outcomes related to child anxiety, caregiver burden, and the negative impact of anxiety on daily functioning. We hypothesized that: 1) pediatricians would positively evaluate the training, 2) pediatricians and parents would report satisfaction with the intervention, and 3)

parents and children would report positive changes in child anxiety severity and the impact of anxiety on functioning.

## Method

### Participants

**Pediatricians**—Seventeen volunteer pediatricians were consented. Eleven answered baseline questionnaires about themselves, completed a three-hour in person training in the *AxAP* at one of the primary care clinics, and used the intervention with at least one child. Of these pediatricians, 63.3% were female, and 81.8% were Caucasian. Pediatricians' self-reported years of clinical experience with children ranged from 3-35 years ( $M = 17.55$  years,  $SD = 10.29$ ). Most pediatricians (72.7%) reported that they did not have any previous training in cognitive behavioral therapy (CBT) for childhood anxiety. Pediatricians worked in a variety of settings including community pediatrics, solo private practice, hospital-based practice, and group practices. Of the 11 pediatricians who enrolled participants, 3 enrolled 1 patient, 3 enrolled 2 patients, 4 enrolled 3 patients, and 1 enrolled 4 patients. Of the six consented who did not complete the study, one female pediatrician, from a group practice, recruited a child but dropped from the study (and left the practice). The remaining 5 pediatricians were unsuccessful at recruiting eligible children.

**Child Participants**—A total of 25 child-parent dyads were consented and completed baseline questionnaires. Among the 25 children, 19 (76.0%) were female, and 11 (44.0%) were Caucasian (9 or 36.0% were African American and 5 or 20% were Other). Children ranged in age from 6-18, the mean age was 11.16 years ( $SD = 3.46$ ). Eighteen families completed the study (i.e., pre and post questionnaires). Of the 7 that did not complete the study, 2 did not attend any sessions and did not complete post intervention forms, 4 completed at least one session but were not responsive to study calls and did not complete post intervention forms; 1 withdrew consent after 1 session with the pediatrician and did not complete any post intervention forms.

### Design

This was a single group, pre-post open trial design (i.e., non-randomized). Baseline and post intervention outcomes were assessed by unblinded parent and child reports.

### Measures

**AxAP Training Satisfaction Questionnaire**—A 30-item questionnaire, developed for this study, was completed by pediatricians after they completed a three-hour in-person training. The questionnaire assessed perceptions about the *AxAP* strategies (e.g., helpfulness, cultural relevance), aspects of the training approach (e.g., didactics, role plays, videos), perceived difficulty of mastering the *AxAP* strategies, overall satisfaction with the training, and perceived barriers to using the *AxAP*.

**AxAP Satisfaction Questionnaire**—Both parents and pediatricians completed a 17-item questionnaire assessing perceived helpfulness of the CBT strategies that comprised the

*AxAP*, overall satisfaction, and questions related to various aspects of *AxAP* intervention (e.g., number of sessions).

**Exit Telephone Interview**—At the end of the study, research staff conducted brief telephone interviews with pediatricians who enrolled at least one participant to gather in-depth reactions to using the *AxAP* (e.g., which CBT strategies they found helpful and/or difficult to teach to children) and to obtain qualitative information about the use of this intervention in primary care settings.

**Screen for Child Anxiety-Related Emotional Disorders-Parent and Child Versions (SCARED; Birmaher et al., 1999; Birmaher et al., 1997)**—The SCARED, completed by children and parents, is a widely used 41-item questionnaire used to assess a broad range of child anxiety symptoms. The SCARED has a large body of evidence supporting its reliability and validity (Birmaher et al., 1999; Birmaher et al., 1997). Each individual item is rated as a 0 (*not true or hardly ever true*), 1 (*somewhat true or sometimes true*) or 2 (*very true or often true*). In the current study a total score was used, derived by summing all 41 items (range is 0-82), higher scores reflect higher anxiety, and a total score of 25 is consistent with youth who meet criteria for a clinical anxiety disorder. Internal consistencies for the total score at baseline were .87 for the child and .93 for the parent-report SCARED total scores.

**Family Burden Assessment Scale (Reinhard et al., 1994)**—This 21-item measure, completed by parents, assesses caregiver burden or strain associated with having a child with a mental health disorder. In this study, parents indicated the degree to which their child's anxiety disrupted aspects of family life, routines, and emotions (e.g., “impact on work,” “impact on family activities,” “how resentful did you feel”) over the past two weeks on a scale ranging from 1 (*not at all*) to 5 (*very much*). In the current study, a total score was used, and higher scores reflect higher levels of perceived burden. The internal consistency for the total score for the current sample was .94 at baseline.

**Child Anxiety Impact Scale –Parent Version (CAIS-P; Langley et al., 2004)**—The CAIS-P questionnaire measures parent-reported impact of their child's anxiety on child functioning across several domains (e.g., academic, social, home). For the current study, parents were asked to rate, on a four-point Likert-type scale (0 = *not at all* to 4 = *very much*), how much difficulty “overall” they or their child had in completing a certain activities over the past month because of his or her anxiety (i.e., with daily activities, social activities, school, family, and in general). A sample item was “Overall, how much has your child's anxiety interfered with daily living activities such as getting ready for school, eating meals in the past month?” A total score was used by summing responses on these five items. Higher scores represent greater impairment in functioning. Internal consistency for the total overall on these five items with the current sample at baseline was .88.

**Demographic Information Questionnaire**—Demographic information was obtained from parents. Variables included child age, gender, race, family income, and marital status.

## Intervention

**Anxiety Action Plan (AxAP)**—The *AxAP* was designed to be delivered by pediatricians or other primary care providers (e.g., nurse practitioners), and its format was modeled after the Asthma Action Plan (see Center for Disease Control website [http://www.cdc.gov/asthma/tools\\_for\\_control.htm](http://www.cdc.gov/asthma/tools_for_control.htm), last updated 2012) which is familiar to health care professionals in order to enhance its usability. Specifically, the *AxAP* was designed to be brief (i.e., delivered over 1 to 4 sessions 15-30 minutes in length), flexible (i.e., based on the individual needs of the child), and the intervention strategies are delivered to each family individually in the primary care clinic. The content of the intervention strategies were adapted from empirically supported CBT manuals for pediatric anxiety disorders (Ginsburg et al., 2012; Kendall 1990; Kendall 1994; Silverman et al., 1999). The primary therapeutic strategies included: psychoeducation about anxiety, exposure (i.e., facing fears), cognitive restructuring (i.e., changing thoughts), problem solving, relaxation, relapse prevention, and anxiety related parenting tips (including contingency management). The *AxAP* also includes supplemental handouts for the pediatrician to use as needed when prescribing each anxiety reduction skill.

## Procedure

The study was approved by The Johns Hopkins University School of Medicine Institutional Review Board. Pediatricians were recruited through direct mailings (paper and email listservs), word of mouth, and through the university's affiliate practices. Interested pediatricians contacted study staff, signed consent forms, and completed pre-training questionnaires about themselves. Recruitment of pediatricians and child participants occurred over a 2 year period. Pediatricians completed a three-hour, in-person training conducted by the first two authors in small groups. The training consisted of an overview of study procedures and a detailed description of each CBT strategy included in the intervention (e.g., psychoeducation, exposure, cognitive restructuring). The training included written materials, videotaped demonstrations, and opportunities to role-play delivering the strategies to children during the training seminar. After the training, pediatricians completed the training evaluation questionnaire. Pediatricians then administered the *AxAP* to eligible children in their practice and completed the post *AxAP* satisfaction questionnaire. An exit telephone interview was also conducted with pediatricians who administered the intervention with a child. Pediatricians were compensated \$50 for participating in the study.

Children were recruited from flyers posted in their primary care offices or were referred to the study by their pediatricians. Interested families contacted study staff and completed a brief phone screen. Families that “passed” the phone screen (i.e., obtained a score of 15 on the SCARED and indicated that they wanted help for their child's anxiety) were seen in person to sign consent and complete baseline questionnaires by study staff. Eligible children were enrolled in the study and met with their pediatrician to receive the *AxAP*. Once the intervention was completed, which was determined by the pediatrician using their clinical judgment, children and parents completed post-intervention questionnaires about anxiety symptoms (SCARED), the impact of anxiety on functioning (CAIS-P), caregiver burden (Family Burden Scale), and a satisfaction questionnaire. Children and parents were compensated a total of \$50 at the post-evaluation for completing the study assessments.

Children attended between 1 and 4 sessions ( $M = 2.83$ ,  $SD = .86$ ; mode = 3). The length of sessions ranged from 15 to 75 minutes ( $M = 34.84$ ;  $SD = 11.85$ ). Sessions were primarily attended by the parent and child together.

### Data Analysis Plan

Frequencies, means and standard deviations were computed for the sample on all measures. To compare pre-post changes on measures, paired t-tests were computed. Exit interviews were not formally analyzed but qualitative information was used to guide revisions for future training and implementing the intervention in primary care settings.

## Results

### Pediatrician Training Evaluation

Table 1 presents results of the *AxAP* training evaluation. The majority of pediatricians perceived most of the strategies comprising the intervention as helpful for reducing anxiety and did not perceive these strategies as difficult to implement. Moreover, the majority endorsed high levels of satisfaction with the training, felt the information was relevant to their practice, would help anxious youth, were culturally acceptable, and that the length of the training was “just right” (though 45.5% indicated the training was too short). Finally, pediatricians rated themselves as “somewhat” to “very” confident in their ability to deliver the *AxAP* strategies to anxious youth.

### Sample Child Clinical Characteristics

The demographic and clinical characteristics of the total sample of children as well as those who dropped out are presented in Table 2. Important to note, both children and families endorsed levels of anxiety in the clinical range on the SCARED at baseline. Parents of participants who left the study prematurely reported significantly higher scores on the SCARED, but there were no other differences on demographic or clinical variables, though trends suggested that non-completers were more likely to be members of racial minority groups (see Table 2).

### Pre-Post Outcomes

Table 3 shows pre-post intervention changes on all outcome measures. Parents reported statistically significant decreases in: a) child anxiety symptoms, b) the negative impact associated with child anxiety, and c) family burden related to having a child with excessive anxiety. Child-reported anxiety symptoms showed a small decrease from pre- to post-treatment, but these changes were not statistically significant.

### Parent Satisfaction with Intervention

Table 4 displays parents' rating perceived helpfulness and satisfaction with of the specific *AxAP* strategies. Overall, parents were satisfied with the intervention and felt they benefitted from receiving the intervention. The majority also reported that working with their pediatrician was helpful and that the numbers of sessions they received (1-4;  $M = 2.83$ ,  $SD = .86$ ) were “just right.”

### Pediatrician Satisfaction, Use of Strategies, Competence with Intervention

Table 5 displays pediatrician's rating of items from the post *AxAP* satisfaction form. Overall, pediatricians reported that the *AxAP* strategies were helpful and that they were satisfied with the intervention. They also reported a statistically significant increase from pre- to post-intervention in their perceived confidence treating anxiety (Table 3;  $t = -3.24$ ;  $p = .02$ ). Table 6 reports on the frequency of each *AxAP* skill used across the 4 sessions, as indicated by pediatricians' ratings after each session. The top three strategies used were psychoeducation, changing thoughts, and problem-solving or exposure. Qualitative suggestions based on the exit phone interviews included: 1) clarifying how to reduce redundancy in using the *AxAP* handout, 2) adapting handouts for adolescents, 3) providing real time supervision and 4) having additional resources available for pediatricians (e.g., videos on the web) to use when seeing a child.

### Discussion

Findings from this pilot study suggest that the use of a brief intervention to reduce excessive anxiety in children delivered by pediatricians in primary care settings is feasible and acceptable. Evidence of this was reflected in several indicators including the success of recruiting and training volunteer pediatricians, the identification and enrollment of anxious youth, and the perceived satisfaction and helpfulness of the intervention reported by pediatricians and parents. Moreover, parents reported significant reductions from pre to post intervention in levels of child anxiety symptoms, disease burden, and the negative impact of anxiety on the child's functioning. These positive findings are qualified, however, by the fact that recruitment of pediatricians and families was slow, and almost 30% (5/17) of the volunteer pediatricians were unable to recruit families, suggesting additional feasibility testing is warranted.

A central aim of this project was to develop an acceptable training for the *AxAP* that would be feasible for pediatricians to fit into their work schedules. Pediatricians received three hours of in-person training which included presentation of strategies used in the *AxAP*, video clips demonstrating the strategies, and role plays. Pediatricians were satisfied with the training (average rating was 4.8 out of 5, where 5 represented "very satisfied"), and the majority felt the length was "just right" (a large minority, 45.5% felt the training was too short, but no pediatrician felt the training was too long). Several pediatricians requested supervision and real time feedback while implementing the intervention based on exit interviews. Ongoing feedback has been shown to be a critical part of skill acquisition (Sholomskas et al., 2005) and will be incorporated into future studies. Related, during exit interviews, pediatricians requested additional online training resources such as copies of the videos displaying the strategies so that they could view them as "refreshers" when they did not recall how to implement a particular skill because too much time had elapsed since the training and seeing their first anxious youth. Online resources for training will also be incorporated into future iterations of testing this intervention.

In terms of the pediatricians' perceptions of the difficulty of implementing the *AxAP* strategies, the majority rated psychoeducation, exposure, and relaxation strategies as "not difficult" to implement. In contrast, the cognitive restructuring, parenting strategies, and

problem-solving strategies were rated as more difficult, suggesting that these strategies may require additional training. An examination of the actual strategies pediatricians reported using with families was also instructive. Specifically, not one pediatrician used the parenting strategies (i.e., parent psychoeducation, contingency management), and less than half of the pediatricians used relaxation training or exposure. The low percentage of sessions devoted to exposure is concerning given that during the *AxAP* training it was emphasized that this strategy was the core therapeutic strategy for anxiety reduction. In contrast, most pediatricians used psychoeducation, cognitive restructuring, and problem solving. Thus, while pediatricians rated these later two modules as difficult to implement, it appears they found them useful or necessary with specific families. Additional evaluation of the reasons each module was (or was not) used as well as the quality of implementation is needed to assess how these strategies were actually delivered, the level of fidelity, and their relation to child outcomes. On a more practical note, pediatricians indicated that they were able to bill for these visits and that their confidence in providing the anxiety reduction intervention improved from pre to post assessments with families.

Taken together, these findings have several implications for the use of a brief intervention to reduce anxiety in primary care settings. Specifically, they suggest that such interventions are feasible to implement and bill for in the primary care setting and that the content, duration, and format of the training is appropriate, though enhanced training and supervision seem warranted.

Parents' perceptions of the helpfulness of the *AxAP* strategies were also very positive and instructive. Of note, parents rated "working with their pediatricians" as among the most helpful components of the intervention, challenging the notion that primary care patients may not want to address mental health issues with their pediatricians but consistent with the notion that pediatricians may be an appropriate provider of preventative or early interventions for mental health care. Other strategies, such as psychoeducation, problem solving, and facing fears ("exposure") were rated as equally helpful by parents; the out of session assignments and daily diaries were perceived as least helpful. This latter finding raises some questions about the extent to which children and parents see the relevance and/or feasibility of practicing the *AxAP* strategies at home and the extent to which they are using the strategies they learned between visits with their pediatrician. Because compliance and completion of between session practice tasks (e.g., homework) is related to better outcomes in mental health treatment studies (Kazantzis et al., 2010), additional monitoring (e.g., through phone calls or emails) may be beneficial to see if this generalizes to the primary care population.

Another key finding of this pilot study was the positive impact of the intervention on child anxiety symptoms. While these data were uncontrolled and warrant further testing in the context of a randomized controlled trial, initial pre-post effect sizes were moderate to large. Specifically, based on parent-reports, children's anxiety symptoms showed a 10-point decrease (1 standard deviation reduction) and parents reported statistically significant reductions in the negative impact of anxiety on their child's academic, social, and family functioning. Moreover, parents reported less caregiver strain after the intervention—such as having to miss or neglect work, disruptions in family relationships, routines, and social



activities, and feeling tired or strained due to the child's anxiety. Children's reports of anxiety were more modest (4-point reduction) a finding consistent with other trials. The magnitude of these parent-reported reductions is similar but slightly more modest than those found in other primary care clinical trials for youth with anxiety disorders. For instance, Kozlowski et al. (2015) examined preliminary outcomes of a seven session nurse-delivered intervention for anxiety in a primary care setting and found a 13.88 point reduction on the child-report SCARED (means were 40.88 and 27 at pre and post-test respectively; Cohen's  $d = .77$ ). Similarly, Chavira and colleagues (2014) reported data on the SCARED for two modes of pediatric anxiety treatment (i.e., 10 sessions face to face with a mental health clinician or clinician supported bibliotherapy). While there were no treatment group differences, both groups showed over an 18 point reduction on the parent-report SCARED. Similar reductions were found on the child-report SCARED. The differences in magnitude between the current study and those of Kazlowski and Chavira are likely due to initial severity (i.e., children with clinical diagnoses have more room to improve on the SCARED) and longer duration of treatment (the modal number of session in the current study was 3). These findings raise questions about what is realistic for pediatricians versus nurses or other mental health specialists (even those located in primary care) to deliver in primary care given their other responsibilities. While more sessions may not be feasible for pediatricians, a brief intervention may help a subset of anxious youth by reducing current distress and the need for more intensive services.

In contrast to treatment studies of youth with anxiety disorders, meta-analyses of anxiety prevention studies—that enroll youth with subclinical levels of anxiety (and not delivered in primary care), show more modest changes in anxiety compared to those observed in the current study. Specifically, data from meta-analyses report average effect sizes in prevention studies to be closer to  $d = .2$  (Fisak, Richard, & Mann, 2011; Teubert & Pinquart, 2011). Finally, when benchmarking scores on the SCARED to established norms, youth in the current study were in clinical range at baseline and, based on parent (but not child), reports moved into the non-clinical range, though scores still remained elevated relative to community samples (Birmaher et al., 1999).

Taken together, it may be that a brief intervention delivered by pediatricians has limits to how much it can reduce child anxiety and also that youth may benefit from a longer intervention in the primary care setting or a referral to a mental health specialist. Studies using collaborative care and co-location models that can facilitate referrals to more specialized mental health providers have shown promise in increasing access and attendance (Kolko et al., 2014).

### Limitations

Findings from this study must be interpreted in the context of several limitations. The most important limitations are the exploratory and uncontrolled study design and that outcomes were not assessed by independent evaluators—all of which are threats to internal validity. The sample of pediatricians and families were also unique as they volunteered to participate, and thus findings may not generalize to the general population. Related, several demographic and clinical variables differentiated families who completed the intervention

and those who did not which may impact the real world implementation of the *AxAP*. Specifically, noncompleters appeared to have higher anxiety, lower income and higher levels of perceived impairment due to the child's anxiety. Thus, greater child and parent distress and low income may have been a barrier to continuing treatment with the pediatrician given co-pays and concerns about insurance reimbursement. Greater parental distress may be an impetus for seeking specialty mental health care rather than a pediatrician-administered intervention. Taken together, a larger more methodologically rigorous design is needed.

In sum, anxiety is the a common psychiatric disorder in pediatric primary care settings, though less than half of affected youth receive treatment for their illness (Chavira et al., 2004). Because a hallmark characteristic of an anxiety disorder is physical or somatic complaints, pediatricians are in an ideal role to identify and intervene early with these children once they receive appropriate training. Results of this open trial suggested that a brief pediatrician-delivered intervention is feasible and both parents and pediatricians found the intervention beneficial but additional testing is warranted.

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**TABLE 1***Pediatrician Training Evaluation Responses (n = 9)*

<b>AxAP Strategies</b>	<b>Very helpful</b>	<b>Somewhat helpful</b>	<b>Undecided</b>	<b>Unhelpful</b>
Identifying anxiety	88.9%	11.1%	0.0%	0.0%
Psychoeducation	100%	0.0%	0.0%	0.0%
Exposure	88.9%	11.1%	0.0%	0.0%
Relaxation	66.7%	33.3%	0.0%	0.0%
Cognitive Restructuring	77.8%	22.2%	0.0%	0.0%
Problem solving	88.9%	11.1%	5.9%	0.0%
Parenting strategies	66.7%	33.3%	0.0%	0.0%
Intervention handouts	77.8%	22.2%	0.0%	0.0%

*Pediatrician Perceived Difficulty of AxAP Strategies (1 = not at all, 5 = extremely difficult)*

<b>AxAP Strategies</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Psychoeducation	54.5%	27.3%	9.1%	9.1%	0.0%
Exposure	63.6%	36.4%	0.0%	0.0%	0.0%
Cognitive Restructuring	18.2%	27.3%	18.2%	36.4%	0.0%
Relaxation	54.5%	27.3%	18.2%	0.0%	0.0%
Parenting Strategies	36.4%	27.3%	9.1%	18.2%	9.1%
Problem Solving	18.2%	27.3%	27.3%	27.3%	0.0%

*Additional Training Questions (Scale: 1 = Not at all, 3 = Somewhat, 5= Very) (n = 11)*

	<b>Mean</b>	<b>Standard Deviation</b>
Satisfaction with training	4.82	0.41
Confidence to provide effective treatment	3.27	0.65
Intervention culturally acceptable?	3.91	0.54
Information relevant for your practice?	4.36	0.81
Feasible to implement in your practice?	3.73	0.47

	<b>Too short</b>	<b>Too long</b>	<b>Just right</b>
Training duration	45.5%	0.0%	54.5%

Note: AxAP= Anxiety Action Plan.

**TABLE 2**

Comparison of Baseline Characteristics of Families Who Dropped and Completed the Study

	<b>Total (N= 25)</b>	<b>Completers (n = 18)</b>	<b>Drops (n = 7)</b>	<b>t /chi</b>	<b>p</b>
Mean Age (SD)	11.16 (3.46)	11.44 (3.54)	10.43 (3.41)	-0.65	0.52
Gender (% Female)	76.00%	66.70%	100%	3.07	0.08
Race (% Caucasian)	44.00%	55.60%	14.30%	3.48	0.06
Marriage (% Married)	44.00%	55.60%	14.30%	3.16	0.08
Income (% over 80K)	44.00%	50.00%	28.60%	0.94	0.33
Family Burden	41.88 (16.46)	40.12 (12.99)	46.14 (23.63)	0.81	0.43
SCARED-P	35.46 (12.61)	33.11 (9.13)	41.16 (18.26)	0.16	0.001
SCARED-C	34.21 (12.40)	32.63 (12.49)	38.26 (12.11)	1.02	0.32
CAIS-P	5.67 (4.09)	5.29 (3.46)	6.57 (5.56)	0.69	0.50

Note: SCARED = Screen for Child Anxiety Related Emotional Disorders; CAIS-P = Child Anxiety Impact Scale- Parent Report (overall impairment score)

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**TABLE 3**

Mean Scores (and Standard Deviations) on Study Measures Pre and Post Intervention

	<b>Pre</b>	<b>Post</b>	<b>t</b>	<b>p</b>	<b>Cohen's d</b>
SCARED-P	33.11 (9.13)	22.88 (10.18)	4.58	0.001	1.06
SCARED-C	31.73 (12.25)	27.90 (9.90)	1.27	0.22	0.34
CAIS-P	5.29 (3.46)	2.82 (3.11)	3.54	0.003	0.75
Family Burden	40.12 (12.99)	32.25 (13.15)	3.59	0.002	0.60
Pediatrician Confidence	2.71 (0.76)	3.71 (0.18)	-3.24	0.02	-1.81

Note: SCARED = Screen for Child Anxiety Related Emotional Disorders; CAIS-P = Child Anxiety Impact Scale- Parent Report (overall impairment score)

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**TABLE 4**

## Parent Ratings of Helpfulness AxAP

	Very helpful	Helpful	Slightly Helpful	Unhelpful
Facts about stress	44.4%	38.9%	11.1%	5.6%
Relaxation	44.4%	11.1%	44.4%	0.0%
Cognitive Restructuring	44.4%	22.2%	16.7%	16.7%
Problem Solving	44.4%	44.4%	11.1%	0.0%
Parenting Strategies	17.6%	47.1%	29.4%	5.9%
Exposure/Facing Fears	38.9%	33.3%	22.2%	5.6%
Out-of-session assignments	16.7%	38.9%	22.2%	22.2%
Daily Diaries	20.0%	6.7%	33.3%	40.0%
Intervention Handouts	33.3%	11.1%	50.0%	5.6%
Working with Pediatrician	61.1%	11.1%	11.1%	16.7%

  

<i>Parent Satisfaction Questions (Scale: 1 = Not at all, 4 = Somewhat, 7= Very Much)</i>				
	Mean		Standard Deviation	
Satisfaction with intervention	5.44		1.50	
Overall benefit from intervention	5.33		1.33	
Number of sessions	16.7% (too few)	5.6% (too many)	77.8% (just right)	



**TABLE 5**

Pediatricians Rating of Helpfulness AxAP Evaluation (n=16)

	<b>Very helpful</b>	<b>Somewhat Helpful</b>	<b>Slightly Helpful</b>	<b>Unhelpful</b>	<b>Not Used</b>
Red flags for anxiety	37.5%	43.8%	12.5%	0.0%	6.3%
Psychoeducation	43.8%	43.8%	0.0%	0.0%	12.5%
Exposure	56.3%	31.3%	6.3%	0.0%	6.3%
Relaxation	62.5%	31.3%	0.0%	0.0%	6.3%
Cognitive Restructuring	62.5%	37.5%	0.0%	0.0%	0.05
Problem solving	43.8%	25.0%	6.3%	18.8%	6.3%
Parenting strategies	31.3%	25.0%	31.3%	0.0%	12.5%
In-session activities	31.3%	50.0%	12.5%	0.0%	6.3%
Session handouts	31.3%	43.8%	6.3%	0.0%	6.3%

	<b>Mean</b>	<b>Standard Deviation</b>
Overall Satisfaction with <i>AxAP</i> (range: 1 = not at all - 5 = very much)	4.25	0.45
Degree <i>AxAP</i> helps anxious children (range: 1 = not at all - 5 = very much)	4.06	0.68
Did you bill for <i>AxAP</i> sessions (% yes)	88	

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**TABLE 6**Frequency of *AxAP* strategies used as reported by pediatricians

	Session 1 (n = 22)	Session 2 (n = 15)	Session 3 (n = 13)	Session 4 (n=3)
Psychoeducation	86.4%	33.3%	0.0%	33.3%
Exposure	0.0%	13.3%	30.8%	0.0%
Cognitive Restructuring	9.1%	40.0%	23.1%	0.0%
Relaxation	4.5%	13.3%	7.7%	0.0%
Problem Solving	0.0%	0.0%	30.8%	33.3%
Relapse Prevention	0.0%	0.0%	7.7%	33.3%
Parenting Strategies	0.0%	0.0%	0.0%	0.0%

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