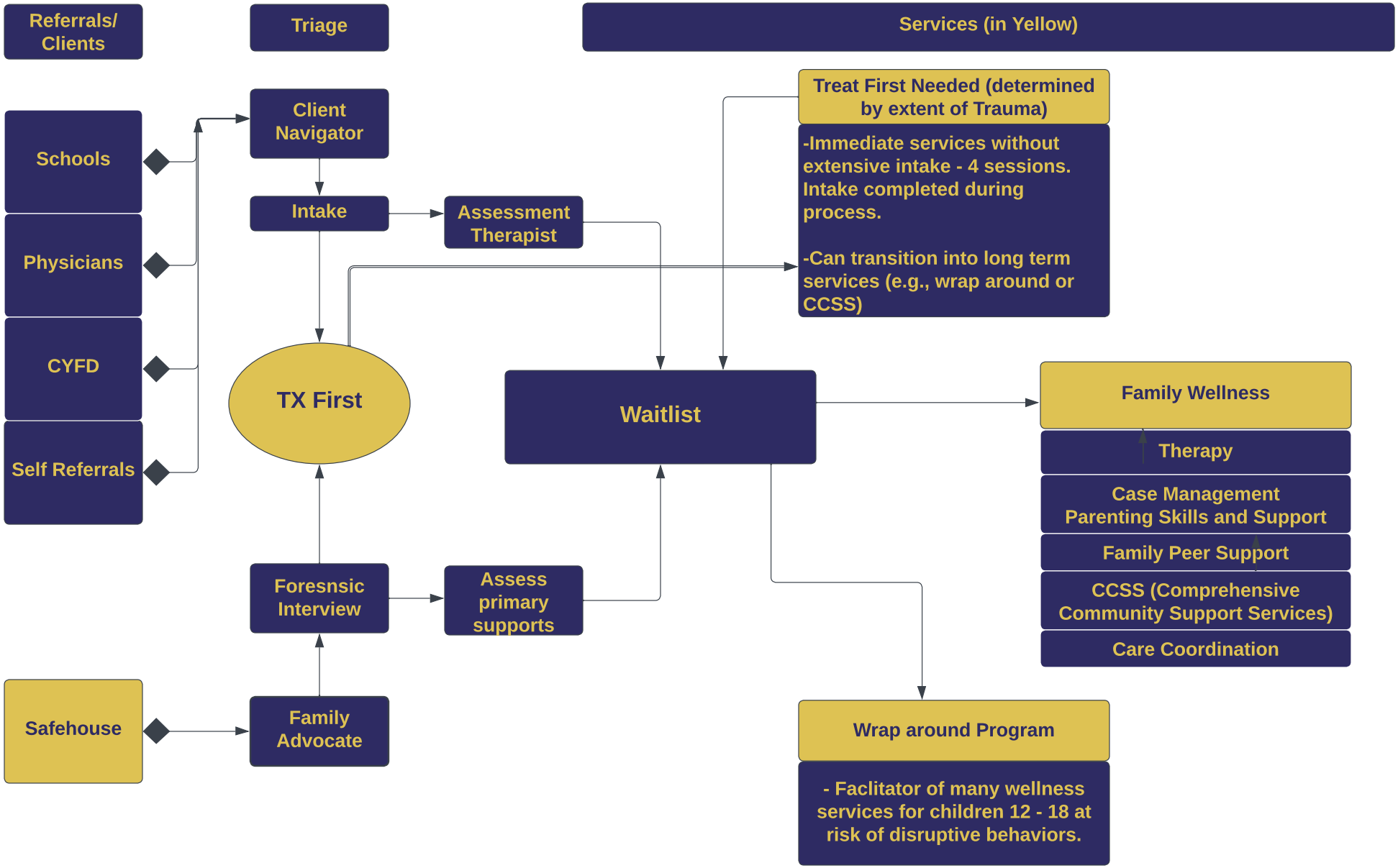
All Faiths Healing Kids & Families in Crisis
CHILDREN'S ADVOCACY CENTER

Mission: "We are the trusted advocates of children and families affected by trauma."
Vision: " Our vision is that New Mexico's children are safe and all families thrive."



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Adverse Child Experiences in New Mexico
October 11, 2022

Summary
New Mexico's (NM) children and youth experience the **highest** rates of ACEs in the nation. Adverse Childhood Experiences (ACEs) are potentially traumatic events of abuse, neglect or household dysfunction that occur before 18 years. High rates of ACEs affecting NM's children and other social determinants of health (SDOH) such as poverty, insecure food and housing, and poor access to health care have lasting impacts on mental, physical, and behavioral health. With prevention, early identification, and management of ACEs, risk of suicide and drug overdose can be lowered, and other chronic conditions can be managed more effectively.

Background
Large studies have shown that youth with multiple ACES are at substantially increased risk for substance use disorder, mental health problems, chronic pain and suicide. (1). Many of NM's children and youth live in vulnerable family settings, with more than a quarter of NM's children living in poverty. Rates of familial substance use and domestic violence are higher in NM than the national average. (2,3). The 2019 Behavioral Risk Factor Surveillance System (BRFSS) data show that an estimated 67.6% of NM adults have experienced at least one Adverse Childhood Experience (ACE), and nearly one in four adults (23.8%) have experienced four or more ACEs. (4) Most common ACEs in NM (per the 2019 BRFSS report) are: emotional abuse, physical abuse, mental illness of a family member, and sexual abuse. (4)

Substance Use Disorder in New Mexico
In 2020, New Mexico ranked 11th in the U.S with 801 drug-related overdose deaths. This is a 56 percent increase in 4 years. One of the fastest growing age-groups for drug overdose deaths in NM is people 15-25 years old. (5,6)

Suicide in New Mexico
Suicide is the leading cause of death in NM for people age 15-17 years, and the second cause of death for ages 5-14, and 18-35 years. (5,7) In 2020, New Mexico recorded 520 suicides (or 10 suicides per week), and now ranks 4th in the U.S for suicide. Eleven percent of high school students surveyed reported attempting suicide, while 25% of LGTBQ+ high school students have attempted suicide- in the last year. (5)

Clinician and Teacher Education in New Mexico
A crucial step in addressing adverse childhood experiences (ACEs), substance use, drug overdose and suicide is training clinicians and teachers serving children and youth. By providing evidenced-based knowledge regarding ACEs and the effects of social determinants of health to all clinicians and professionals who work with children and families, those providers can better assess at-risk youth and implement integrated and culturally appropriate interventions. Early intervention is an opportunity to modify the development of a substance use disorder and maybe prevent suicide.

To report cases of suspected child abuse or neglect, Call NM CYFD at 1-855-333-SAFE (7233) For information about the Office of Children's Rights, please call 505-629-9626; email cyfd.ocr@cyfd.nm.gov

Screening

Children/Adolescents can be most effectively screened for ACEs in the care of a licensed behavioral health and/or pediatric medical provider. A biopsychosocial history, in addition to a validated screening tool is considered best practice. For additional information regarding ACES screening tools, please visit:
https://www.porticonetwork.ca/web/childhood-trauma-toolkit/tools
https://www.acesaware.org/learn-about-screening/screening-tools/

ACEs Education

- The Adverse Childhood Experiences ECHO at the University of New Mexico is beginning a program this month, October 2022- for all clinicians, behavioral health providers, and teachers
- https://hsc.unm.edu/echo/partner-portal/programs/new-mexico/adverse-childhood/ Adverse Childhood Experiences ECHO Website and Registration- no-cost CME/CEU
  1. All Hands On Deck ECHO for Adverse Childhood Experiences- 1st Thursday every month, MT
  2. Putting Faces to the ACES ECHO - 2nd and 3rd Thursdays every month 12-1pm, MT
- https://www.annaageeight.org/100-percent-book/ 100% Community
- https://vetoviolence.cdc.gov/apps/main/aces-resources

Management/Treatment

Youth/adolescent should be referred for consultation to a licensed child behavioral health provider and/or pediatric medical clinician. School-Based Health Centers also have behavioral health providers and staff ready to help and are located in many schools throughout NM's 33 counties.

For School-Based Health Center Information:

https://www.hsd.state.nm.us/lookingforinformation/school-based-health-center-managed-care-organization-project/
https://www.nmasbhc.org/school-based-health-centers/

For Federally Qualified Health Centers in New Mexico:

https://npidb.org/organizations/ambulatory_health_care/federally-qualified-health-center-fqhc_261qf0400x/nm/

References:

1. Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American journal of preventive medicine*, *14*(4), 245-258.
2. Child Trend Reports, 2019
3. Results First, 2017
4. 2019 Youth Risk and Resiliency Survey (NM); NMDOH and NM PED
5. The New Mexico Epidemiology Report, The New Mexico Epidemiology Report (ISSN No. 87504642)
6. https://www.nmhealth.org/data/view/substance/2682/, Accessed October 10, 2022
7. Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2020 on CDC WONDER Online Database, released in 2021.

New Mexico Health Alert Network: To register for the New Mexico Health Alert Network, click the following link to go directly to the HAN registration page https://nm.readyop.com/fs/4cjZ/10b2. Please provide all information requested to begin receiving important health alerts and advisories.

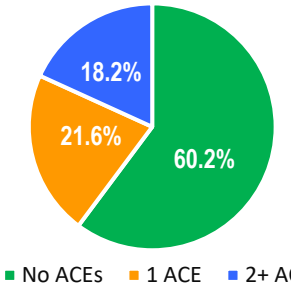
NEW MEXICO | FACT SHEET 2021
Strong Roots Grow a Strong Nation
Advancing Policies to Catalyze Well Being by Addressing the Epidemic and Legacy of Adverse Childhood Experiences

About this FACT SHEET
All findings reported here are based on analysis of data from the 2018-2019 National Survey of Children's Health (NSCH) and most recent data from the Behavioral Risk Factor Surveillance Survey (**BRFSS**).
For questions email info@cahmi.org

Nearly 40% of US children[1] and two-thirds of adults[2] have been exposed to at least one Adverse Childhood Experience—such as physical or emotional neglect or abuse, living with someone with a drug, alcohol or serious mental health problem, the death of a parent and being exposed to violence or discrimination in the home or community. **Approximately 1 in 5 children have 2+ ACEs where large impacts are seen.**

Breakthrough neurobiological sciences explain mechanisms linking ACEs exposure levels to markedly higher rates of chronic physical illnesses, mental, emotional and behavioral health problems and lowered quality of life and life expectancy.[3] Methods to prevent and heal the legacy of the trauma from ACEs are available. **Policy shifts are needed to align with science and what is possible.**

US children with ACEs, 2018-19[1]



New Mexico children with ACEs, 2018-19[1]

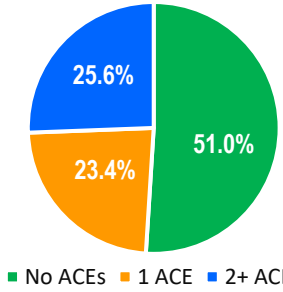


Table 1: National & NEW MEXICO CHILD outcomes by ACEs, (2018-2019 NSCH)[1,4,5]

Key child outcomes (age in years)	Nation[1]			New Mexico[1]*		
	No ACEs	1 ACE	2+ ACEs	No ACEs	1 ACE	2+ ACEs
Child has a chronic condition requiring above routine amount or type of health care services[4] (0-17)	13.3%	20.8%	35.0%	10.7%	18.5%	35.4%
Child has an ongoing emotional, developmental, or behavioral problem (0-17)	4.7%	9.3%	20.4%	3.8%	5.4%	24.7%
Child is overweight or obese (10-17)	25.8%	32.6%	39.7%	25.1%	41.1%	32.6%
Child is bullied, picked on, or excluded by other children (6-17)	41.9%	48.1%	60.1%	46.9%	51.4%	67.5%
Child's mother is in very good/excellent health (0-17)	77.9%	64.4%	47.6%	76.6%	57.9%	49.6%
Child engages in school (6-17)	56.7%	47.7%	33.4%	59.7%	49.8%	33.3%
Resilience and Flourishing[5] (met all 3 criteria) (6-17)	73.4%	64.4%	52.6%	72.6%	66.3%	49.7%
Child's family stays hopeful when facing problems (0-17)	61.8%	54.6%	48.4%	66.8%	54.4%	47.6%

**To see your state data click on the outcome and select your state*

Prevalence of adults with ACEs[2]

- 61.5% of adults across 23 states with data had 1+ ACEs
- 24.6% were estimated to have had 3 or more ACEs

Estimates are based on 2011-2014 Behavioral Risk Factor Surveillance System data across 23 states that collected ACEs data.[2]

Table 2: Odds of key ADULT health problems for adults with 1, 2, 3 or 4+ ACEs compared to adults with no ACEs**

Key adult outcomes	0 ACEs	1 ACE	2 ACEs	3 ACEs	4+ ACEs
Suicide attempts	100%	180%	300%	660%	1220%
Injected drugs	100%	130%	380%	710%	1003%
Consider self an alcoholic	100%	200%	400%	490%	740%
Recent depression	100%	150%	240%	160%	460%
Lung disease	100%	160%	160%	220%	390%

**SOURCE: Based on research from the CDC-Kaiser ACEs Study

- Children with multiple ACEs whose families have greater resilience and parent-child connections have nearly 400% times greater odds of flourishing. **We can promote health and healing even as we work to prevent ACEs.**[5]
- Children with ACEs are more likely to have a chronic condition, have chronic mental, emotional or behavioral problem and either bully or be bullied.
- Children with ACEs are less likely to have mothers who are in very good or excellent physical and mental health and are less likely to engage in school or live in families that feel hopeful during difficult times.

States, federal agencies, health care, education, social services and business sectors alike recognize the toll we have paid by not fostering healthy child development and addressing ACEs and trauma in adults. Recommendations for policy change are widespread and require strong collaboration across federal agencies to enable the innovation, and healing our nation needs and deserves. Our nation's health and strength depend on it.

Key References: [1]Child and Adolescent Health Measurement Initiative (CAHMI), Data Resource Center for Child and Adolescent Health, 2018-2019 National Survey of Children's Health Interactive Data Query, (www.childhealthdata.org); [2]Merrick M, Ford DC, Ports KA. Prevalence of Adverse Childhood Experiences from the 2011-2014 Behavioral Risk Factor Surveillance System in 23 states. JAMA Pediatrics November 2018; [3]Berens AE, Jansen SKG, Nelson CA 3rd. Biological embedding of childhood adversity: from physiological mechanisms to clinical implications. BMC Med. 2017 Jul 20;15(1)135; [4]Bethell CD, Newacheck P, Hawes E, Halfon N. Adverse Childhood Experiences: Assessing the Impact on Health and School. Engagement and the Mitigating Role of Resilience. Health Affairs, 33, no.12 (2014):2106-2115. [5]Bethell CD, Gombojav N, Whitaker RC. Family Resilience and Connection Promote Child Flourishing, Even Amid Adversity. Health Affairs, May 2019.

Prepared by The Child and Adolescent Health Measurement Initiative. Citation: Child and Adolescent Health "New Mexico Fact Sheet 2021: Strong Roots Grow a Strong Nation". Child and Adolescent Health Measurement Initiative (CAHMI), Johns Hopkins Bloomberg School of Public Health. Retrieved dd/mm/yy from www.cahmi.org.

Note: The "economic hardship" ACEs item changed in 2018 leading to fewer children being identified with ACEs compared to prior years.

AFCAC's health therapy department in the FWP consists of masters-level therapists and clinical social workers who provide evidence-based, trauma-informed behavioral health therapy. Individual, family, and group therapy are offered using the following techniques:

The goal of the UNM Evaluation Lab is to identify, adapt, and pilot a survey tool to measure depression and anxiety symptoms for children. The goal of the assessment tool is to measure the level of depression/anxiety at the time of intake and throughout the recommended term of therapy.

Evaluations Questions:

1. What instrument(s) can AFCAC clinical staff use to track depression and anxiety symptoms among children?
2. What support systems, if any, can be implemented with the survey to enable intake staff and therapists to properly administer the survey?
3. How can AFCAC use the results of symptom assessment to improve services/processes on a continued basis?

Review of the Literature

1. Ahlen, J., & Ghaderi, A. (2017). Evaluation of the Children's Depression Inventory—short version (CDI–S). Psychological Assessment, 29(9), 1157-1166. doi:10.1037/pas0000419

   Summary: This study evaluates the validity and reliability of the Children's Depression Inventory short version (CDI-S) as a measure of depression and anxiety in children and adolescents. The study group consisted of children ages 8-12 in Sweden.

   Research Questions:
   - ✓ Does the 10 item CDI-S questionnaire have the same psychometric properties as the original 27 item CDI questionnaire?
   - ✓ Does the CDI adequately measure both depression and anxiety?
   - ✓ Do factors, such as gender, age and social economic status affect the result of the survey?
   - ✓

   Main findings:
   - ✓ The CDI-S was highly correlated with the RCADS to measure depression. Although the CDI-S correlated with the SCAS scales, there was more variation when measuring anxiety.
   - ✓ Girls in the study showed higher levels of internalized symptoms depression and anxiety than boys.

- ✓ Boys in the study showed higher levels of externalized symptoms of depression and anxiety than girls
- ✓ Socio-economic status was more of a factor in boys exhibiting symptoms of depression and anxiety than girls.

Methods:
The study first compared the CDI-S questionnaire to 2 widely used instruments to measure anxiety and depression that are known for their reliability and validity. The Spence Children's Anxiety Scale (SCAS) is a questionnaire used to measure anxiety symptoms. Revised Child Anxiety and Depression Scale (RCADS) is an adaption of the SCAS that was developed to better understand the interconnectedness of anxiety disorders and major depression. In this study, only the subscale of the RCADS to measure depression was used for comparison. 804 participants from schools in Sweden were given the CDI-S at the beginning of the study. The study divided the participants into two groups, those that were given the SCAS and RCADS at the same time as the CSI-S and those that were given SCAS and RCADS 2 weeks later. An internet survey was conducted for parents to report their socio-economic economic status and demographics.

Strength of Evidence:
Further research needs to be done. The study was conducted with children ages 8-12. A comparison of the RCADS data to CSI-S included data from RCADS from all children under the age of 18. The study was examined data from children that self-reported low-level symptoms of anxiety and depression. A significant portion of the parents did not report their socio-economic status.

Project Implications:
The CDI-S is less time consuming than other measures of depression and anxiety. The CDI-S measures both depression and anxiety and is more valid and reliable at measuring depression than RCADS data. Gender differences were shown to be highly significant. Socio-economic status and demographics were significant factors.

2. Angold, A., Erkanli, A., Copeland, W., Goodman, R., Fisher, P. W., & Costello, E. J. (2012). Psychiatric diagnostic interviews for children and adolescents: A comparative study. *Journal of the American Academy of Child & Adolescent Psychiatry, 51*(5), 506-517. doi:10.1016/j.jaac.2012.02.020

Summary:
This study compares 3 measures of incidences of psychiatric disorders in children and adolescents, the Diagnostic Interview Schedule for Children (DISC) ("respondent-based"), the Child and Adolescent Psychiatric Assessment (CAPA) ("interviewer-

based"), and the Development and Well-Being Assessment (DAWBA) ("expert judgment"). These diagnostic interviews measure depression, anxiety, oppositional and conduct disorder, and ADHD. The study included children ages 6-19 from Duke's Primary Care Pediatric Clinics in Durham, North Carolina, The study wishes to find if the results of measurement are similar and if not, which are the most appropriate to employ and under which circumstances.

Research Question:

- ✓ Are these 3 diagnostic interview measurements comparable and do the produce similar results?
- ✓ Does the level of training of the interviewer matter?
- ✓ Does the amount of time needed to conduct the interview matter?
- ✓ Which of the diagnostic interview measurements may over-report or under-report incidences of psychiatric disorders?

Main findings:

- ✓ DAWPA reports fewer incidences, but more severe cases. Scores were higher for DAWPA only interviews than for CAPA and DISC only interviews. DAWPA may under-report incidences. CAPA and DISC may under-report severity.
- ✓ DAWPA requires clinical training
- ✓ CAPA and DISC do not require clinical training
- ✓ CAPA only interviews and DISC only interviews had similar results.
- ✓ The DAWBA generated significantly fewer cases of depression and anxiety than the CAPA, but similar rates of behavioral disorders (ADHD, ODD, CD), and fewer cases of ADHD, ODD, and anxiety than the DISC.

Methods:

Children from 6-19 years of age with the same demographics and socio-economic level were randomly assigned into 3 groups. Each group was then given one of the three interview instruments. After one week, the participants were given another interview instrument with another interviewer.

Strength of Evidence:

This is a strong comparison. The study chose participants based on similar DMV-5 scores prior to the start of the interviews. Participant were randomly assigned, and demographics were controlled. The study did not use the subscale for phobias contained in the DISC which would report higher incidences of psychiatric disorders compared with the CAPA and the DAWBA interviews. However, given the different approaches of the interview instruments, the study was not able to control for the level of training of the interviewer, or any inherent differences in individual interviewer's biases. Due to time constraints, the study was not able to give all 3 questionnaires at the same time to participants.

Project Implications:

CAPA and DISC allow for questionnaire adjustments, such as skips, while DAWBA does not. According to the study, CAPA offers the best tracking of incidences over time. With regard to time constrains, DAWBA was completed in approximately 30 minutes. DISC required approximately 54 minutes and CAPA 60 minutes.

3. Chorpita, B. F., Daleiden, E. L., Park, A. L., Ward, A. M., Levy, M. C., Cromley, T., . . . Krull, J. L. (2017). Child steps in California: A cluster randomized effectiveness trial comparing modular treatment with community implemented treatment for youth with anxiety, depression, conduct problems, or traumatic stress. Journal of Consulting and Clinical Psychology, 85(1), 13-25. doi:10.1037/ccp0000133

   Summary: The study, conducted in Los Angeles with participants ranging in age from 5 to 15 years of age. seeks to determine if the Modular Approach to Treatment of Children (MATCH) is more effective than community-implemented treatment (CIT) in the reduction of anxiety, depression, disruptive behavior, and/or traumatic stress.

   MATCH-ADTC is a customized therapy approach that adjusts therapy focus based on feedback. Anxiety, depression, trauma, or conduct problems are addressed and treated.

   The Crisis Intervention Team (CIT) program is a widely used model for treatment. The CIT Model promotes partnerships between social services, law enforcement, behavioral health providers, courts and families and is static based on best practices for treatment.

   The study uses several measures to judge effectiveness:

   - Brief Problem Checklist (BPC)—Child and caregiver versions
   - Top problems assessment (TPA)—Child and caregiver versions
   - Revised Child Anxiety and Depression Scales (RCADS)— Child and caregiver versions
   - University of California at Los Angeles Post-traumatic Stress Disorder Reaction Index (UCLA PTSD Index)—Child, adolescent, and caregiver versions
   - Strength and Difficulties Questionnaire (SDQ)—Child and caregiver versions
   - Services assessment for children and adolescents (SACA)-- Parent version4
   - Services for children and adolescents--Parent interview (SCAPI)
   - Client Satisfaction Questionnaire—Child and caregiver versions

   Research Question:

   Which of these 2 approaches delivered better results in terms of outcomes for the deduction of disruptive behavior, and/or traumatic stress, anxiety and depression in the short-term and sustainability in the long-term?

Main findings:
Using the BPC, TPA and the other scores at baseline and at various times during invention and at final BPC and TPA scores assessment, it was found:

- ✓ 60% of participants involved in a MATCH intervention showed improvement versus 36.7% of participants involved in the CIT treatment approach. To evaluate outcomes TPA assessments were also gathered weekly.
- ✓ MATCH participants showed faster rates of improvement.
- ✓ Match participants required less follow-up therapy sessions long-term compared to CIT participants.
- ✓ Match participants had a higher rate of therapy session engagement.

Methods: 138 youth between the ages of 5 and 15 that were found to have similar cut off scores for anxiety, depression, conduct problems or traumatic stress at baseline were randomly assigned to CIT and Match approaches and randomly assigned to therapists within each cluster. Differences between the therapists in the 2 treatment groups were not statistically significant. The final assessors of the outcomes were blinded to which treatment approach had been used.

Strength of Evidence:
This study used robust measurements to establish a baseline before intervention and used several measurements throughout the study. The weakness of the study is that MATCH does not specifically address trauma, while several of other interventions do. CIT does not specifically address anxiety. The study broke down demographics, socio-economic status and age within each treatment group.

Project Implications:
The study effectively established a baseline, used several different scoring scales and accounted for demographics and socio-economic status. Several different scoring scales may be used to evaluate the effectiveness of a program. This study also controlled for the amount of therapy sessions attended by clients. The age range in this study is consistent with the age range for evaluation in our proposed study.

4. Krause, K. R., Edbrooke-Childs, J., Singleton, R., & Wolpert, M. (2022). Are we comparing apples with oranges? Assessing improvement across symptoms, functioning, and goal progress for adolescent anxiety and depression. *Child Psychiatry & Human Development*, *53*(4), 737-753.

Summary:
This study uses 3 combinations of widely used and validated outcome scales in randomized groups. This study was conducted to see if a more meaningful and useful outcome measurement for mental health improvement and quality of life could be

gleaned by using more than one indicator of improvement and by using a more holistic approach using multiple domains and measuring goal setting progress

Research Question:
Which group showed more a more meaningful a more meaningful improvement outcome? Meaningful improvement was defined as a reliable and valid improvement on a standardized scale and on an idiographic, goal-based outcome measure.

Main findings:

- ✓ Consistent cross-domain only showed meaningful improvement impact in only 15.6% of the cases. Close to one in four (24.0%) young people with reliably improved symptoms reported no reliable improvement in functioning.
- ✓ One in three (34.8%) young people reported meaningful goal progress but no reliable symptom improvement
- ✓ Symptom only measurements may over-estimate or under-estimate meaningful improvement and functionality
- ✓ Aggregate ratings may not be able to determine progress in specific and distinct symptoms indicators.

Methods:
This study analyzed naturalistic outcome date for 15,352 children aged 12-18 in England for which a diagnosis of anxiety or depression had been given after an initial assessment. The study randomly assigned the participants into 3 group to assess which group might have more meaningful and useful improvement ratings. Group 1 used two measures of internalizing symptoms (Comparison within symptom domain SDQ Emotion vs. RCADS). Group 2 used two measures of psychosocial functioning (Comparison within functioning domain SDQ Impact vs. C/ORS). Group 3 used aggregate ratings in the domains of symptoms, functioning, and assess progress towards self-defined goals (Comparison between symptoms, functioning, and goal progress domains)

Strength of Evidence:
The study was conducted longitudinally for 4 years and has a large sample size. Assignment to the groups being assessed was randomized. The study used outcome measures that are widely used and have a have been determined to be reliable and valid for determining levels of anxiety, depression, progress towards goals and externalized functionality.

Project Implications:
Child Outcome Rating Scale (CORS) which can be used with children as young a 6 years of age showed higher levels of improvement than the SDQ Impact survey. Goal progress

assessments and RCADS which have many subscales for individual symptoms may be combined in a holistic approach along with CORS and the SDQ Impact survey

5. Ruby, F., da Silva, L. C., Tait, N., Rashid, A., Singleton, R., Atkins, L., ... & Jacob, J. (2022). Children and young people's mental health outcome measures in paediatrics. *Archives of Disease in Childhood*.

Summary: This paper provides a description of various mental health treatment outcome measures and provides guidance on which one to choose given the child's unique mental health diagnosis and circumstances. The paper discusses the following outcome measures:

- ✓ The Revised Children's Anxiety and Depression Scale (RCADS)
- ✓ The Patient Health Questionnaire 9 (PHQ-9)
- ✓ The Generalized Anxiety Disorder 7 survey (GAD-7)
- ✓ The Youth Self-Report (YSR)
- ✓ The Eating Disorder Examination Questionnaire (EDE-Q)

Once an outcome measure or a combination of outcome measures has been chosen, the paper provides guidance on how to interpret the findings and how the findings can inform continued mental health care.

Main findings:

- ✓ RCADS has been shown to be valid and reliable in assessing anxiety and depression. The outcome measure has 6 subscales that included separation anxiety disorder, social phobia, generalized anxiety disorder, panic disorder, obsessive compulsive disorder and low mood.
- ✓ GAD-7 is useful for measure general anxiety disorder but may not be able to capture distinct types of anxiety that the RCADS is able to measure.
- ✓ The PHQ-9 is a widely used questionnaire the is shown to be reliable in measuring depression and its severity.
- ✓ The YSR has eight subscales: the tendency to withdraw, somatic symptoms, anxiety and depression, social problems, thought problems, attention problems, rule-breaking behavior, and aggressive behavior. The subscales are grouped into externalizing and internalizing behaviors. The measure has been widely used and is available in many languages.
- ✓ The EDE-Q is not a diagnostic tool, but can give an indication of an eating disorder or chronic health problems.
- ✓ The person administering the outcome measurement should familiarize themselves with each survey and choose the one most appropriate to the child.
- ✓ Interpretations of the findings should put in the larger context surrounding the child.

- ✓ It is essential to inform the client what the measurement will be used for and to provide feedback to the client.

Project Considerations: The questionnaires do not require special training to complete. Most of the instruments discussed in this paper are used to measure outcomes of treatment for anxiety and depression were designed for youth over the age of 10. However, the RCADS is used to assess symptoms of depression and anxiety for children and young people aged 8–18 and the YSR has been used with children as young a 7. The reliability and validity of the psychometrics in the instruments was mostly evaluated on white children in the Northern Hemisphere with the exception of the YSR. More research needs to be done to test the validity for demographically diverse children and those with comorbidities, such as chronic illness.

Review of Survey Instruments

To determine which instrument would be most beneficial for AFCAC to implement, the Evaluation Lab team members reviewed the scholarly literature published since 2017 (five years). There are five instruments throughout most of the literature, each of them with their corresponding advantages and disadvantages.

The five instruments are the Patient Health Questionnaire (PHQ-9), the General Anxiety Disorder survey (GAD-7), the Center for Epidemiologic Studies Depression Scale (CES-D), the Revised Child Anxiety and Depression Scales (RCADS) and the Children's Depression Inventory (CDI-2). The American Psychological Association website has the details of each instrument. (APA.org/depression-guideline/assessment) As stated above, there are advantages and disadvantages of each as they relate to the needs of AFCAC.

The reliability and validity have been tested for all five instruments. It depends on the specific needs of AFCAC to determine which survey to use. The PHQ-9 and the GAD-7 results can be compared to national data, whereas the RCADS and CDI results are used individually to determine treatment strategies. The RCADs is more complicated to score but the survey is free, whereas there is a charge for each CDI survey. Please see the chart below.

The PHQ-9 scale is a commonly used scale to measure depression. It consists of 9 questions and is not copyrighted, see chart below. National results and data can be found through UCLA. The reliability and validity have been tested. According to Martin, "the PHQ depression scale, which seems to be a useful tool to recognize not only major depression but also subthreshold depressive disorder in the general population." (Martin, 2006) Because this scale is so widely used it would be easy for AFCAC to compare their data to national data free of cost. Results can also be used on an individual level to determine avenues of treatment. This scale has been used in combination with other scales such as the GAD-7 that measures severity of anxiety.

The GAD-7 scale has 7 questions and is used to measure the severity of anxiety in individuals aged 13 years and older. Studies indicate this tool is a valid and reliable measure of anxiety in adolescents. (Ruby, 2022) According to Ruby, "The GAD-7 has been used as a measure of anxiety in a range of pediatrics-related research, including anxiety in transgender and gender diverse children and young people, children with Williams syndrome and in adolescents after receiving a concussion." (Ruby, 2022) This scale has been used in combination with others such as the PHQ-9 that measures depression. This survey is free and readily available in several languages online.

According to Radloff, "The CES-D scale is a short self-report scale designed to measure depressive symptomatology in the general population." (Radloff, 1977) It has been tested in both households and psychiatric settings and has been found to be both reliable and valid. The CES-D scales, as shown in the graph below, consist of 20 questions and can be given to individuals as young as 6 years old. The score ranges from 0 to 60, with 16 and higher showing depression symptoms. (apa.org/depression-guideline/assessment) This scale was also tested among oncology patients to see if results differed according to age. The results of this study found that no adjustments were necessary to account for age. (Saracino, 2018) It is not copyrighted, and comparable data can be found. This survey is free and readily available in several languages online.

The RCADS scale consists of 48 questions and is suitable for individuals aged 6 to 18, see chart below. According to Ruby, the RCADS has been shown to be valid and reliable in assessing anxiety and depression. The outcome measure has 6 subscales that included separation anxiety disorder, social phobia, generalized anxiety disorder, panic disorder, obsessive compulsive disorder and low mood. (Ruby, 2022)

Although this scale has been successful in assessing anxiety and depression, there is not any national data that we would be able to compare results to. This scale would be best used as a tool to determine treatment and measure individual outcomes rather than organizational outcomes. This tool is free and offered by UCLA.

The CDI scale was created by adapting the Beck Depression inventory scale for adults to children. (Kovacs, 1978) This scale is copyrighted by Pearson Assessments. It measures both anxiety and depression. There are charges per survey, however there is guidance in interpreting and reporting results. This scale includes 28 questions and can be used for individuals aged 7 to 17, see chart below. According to Kovacs, “The significant correlation between CDI scores and clinicians' independent global depression ratings suggests that the inventory taps a clinically valid entity.” (Kovac, 1978) There is also a shorter version of the CDI, CDI-S. The CDI-S consists of 10 questions rather than 27. Worldwide studies have been conducted to test the reliability of the CDI. It was found that the longer version was more reliable than the shorter version. (Sun, Wang, 2015) However, a study conducted in Sweden concluded that the CDI-S was more reliable than the RCADS. (Ahlen, 2017)

We will present this information to AFCAC leadership and the therapists that will be administering this tool and let them decide which tool will be most beneficial for the organization.

Instrument	Age of participants	# of questions	Cost	Source	Measurement	Data Interpretation	Individual vs. Organizational Data
PHQ-9	12+	9	Free	UCLA	The PHQ-9 score ranges from 0 to 27 -Score 5–9: mild depression; -Score 10–14: moderate depression; -Score 15–19: moderately severe depression; -Score 20+: severe depression	The PHQ-9 is a widely used questionnaire that is shown to be reliable in measuring depression and its severity. (Martin, 2006)	Organizational and individual. Measures depression
GAD-7	13+	7	Free	Pfizer	The GAD-7 score ranges from 0 to 21. -Score 0-4: Minimal Anxiety. -Score 5-9: Mild Anxiety. -Score 10-14: Moderate Anxiety. -Score 15+: Severe Anxiety.	GAD-7 is useful for measure general anxiety disorder but may not be able to capture distinct types of anxiety that the RCADS is able to measure. (Ruby, 2022)	Organizational and individual Measures anxiety
CES-D	6+	20	Free	Laurie Radloff	The CES-D score ranges from 0 to 60. -If more than four questions are missing answers, do not score the CES-D questionnaire. -A score of 16 points or more is considered depressed.	The CES-D scale is designed to measure depressive symptomatology in the general population. (Radloff, 1977)	Individual Measures Depression
RCADS	6 - 18	48	Free	Chorpita and Colleagues	To score the RCADS manually, each item is assigned a numerical value from 0-3, where 0 = Never, 1 = Sometimes, 2 = Often, and 3 = Always. -For each subscale add the numerical values for each item together.	RCADS has been shown to be valid and reliable in assessing anxiety and depression. The outcome measure has 6 subscales that included separation anxiety disorder, social phobia, generalized anxiety disorder, panic disorder, obsessive compulsive disorder and low mood. (Ruby, 2022)	Individual Measures anxiety and depression
CDI	7 - 17	28	Pricing Varies	Pearson Assessment	The CDI score ranges from 0 to 54. -A higher CDI score means a higher depressive state.	The CDI-S is less time consuming than other measures of depression and anxiety. The CDI-S measures both depression and anxiety and is more valid and reliable at measuring depression than RCADS data. (Ahlen, 2017)	Individual Measures anxiety and depression

Patient Health Questionnaire and General Anxiety Disorder (PHQ-9 and GAD-7)

Date_____ Patient Name:_____ Date of Birth: _____

Over the last 2 weeks, how often have you been bothered by any of the following problems?
***Please circle your answers*.**

PHQ-9	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
1. Little interest or pleasure in doing things.	0	1	2	3
2. Feeling down, depressed, or hopeless.	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much.	0	1	2	3
4. Feeling tired or having little energy.	0	1	2	3
5. Poor appetite or overeating.	0	1	2	3
6. Feeling bad about yourself – or that you are a failure or have let yourself or your family down.	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television.	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual.	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself in some way.	0	1	2	3
Add the score for each column				

Total Score (add your column scores): _____

If you checked off any problems, how difficult have these made it for you to do your work, take care of things at home, or get along with other people? (Circle one)

Not difficult at all **Somewhat difficult** **Very Difficult** **Extremely Difficult**

Over the last 2 weeks, how often have you been bothered by any of the following problems?
***Please circle your answers*.**

GAD-7	**Not at all sure**	**Several days**	**Over half the days**	**Nearly every day**
1. Feeling nervous, anxious, or on edge.	0	1	2	3
2. Not being able to stop or control worrying.	0	1	2	3
3. Worrying too much about different things.	0	1	2	3
4. Trouble relaxing.	0	1	2	3
5. Being so restless that it's hard to sit still.	0	1	2	3
6. Becoming easily annoyed or irritable.	0	1	2	3
7. Feeling afraid as if something awful might happen.	0	1	2	3
Add the score for each column				

Total Score (add your column scores): _____

If you checked off any problems, how difficult have these made it for you to do your work, take care of things at home, or get along with other people? (Circle one)

Not difficult at all **Somewhat difficult** **Very Difficult** **Extremely Difficult**

UHS Rev 4/2020

Center for Epidemiologic Studies Depression Scale (CES-D), NIMH

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week.

	During the Past Week			
	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)
1. I was bothered by things that usually don't bother me.	☐	☐	☐	☐
2. I did not feel like eating; my appetite was poor.	☐	☐	☐	☐
3. I felt that I could not shake off the blues even with help from my family or friends.	☐	☐	☐	☐
4. I felt I was just as good as other people.	☐	☐	☐	☐
5. I had trouble keeping my mind on what I was doing.	☐	☐	☐	☐
6. I felt depressed.	☐	☐	☐	☐
7. I felt that everything I did was an effort.	☐	☐	☐	☐
8. I felt hopeful about the future.	☐	☐	☐	☐
9. I thought my life had been a failure.	☐	☐	☐	☐
10. I felt fearful.	☐	☐	☐	☐
11. My sleep was restless.	☐	☐	☐	☐
12. I was happy.	☐	☐	☐	☐
13. I talked less than usual.	☐	☐	☐	☐
14. I felt lonely.	☐	☐	☐	☐
15. People were unfriendly.	☐	☐	☐	☐
16. I enjoyed life.	☐	☐	☐	☐
17. I had crying spells.	☐	☐	☐	☐
18. I felt sad.	☐	☐	☐	☐
19. I felt that people dislike me.	☐	☐	☐	☐
20. I could not get "going."	☐	☐	☐	☐

SCORING: zero for answers in the first column, 1 for answers in the second column, 2 for answers in the third column, 3 for answers in the fourth column. The scoring of positive items is reversed. Possible range of scores is zero to 60, with the higher scores indicating the presence of more symptomatology.

NovoPsych

Revised Child Anxiety and Depression Scale - Child version (RCADS-Child)

Instructions:

Check the word that shows how often each of these things happens to you. There are no right or wrong answers.

		Never	Sometimes	Often	Always
1	I worry about things	**0**	**1**	**2**	**3**
2	I feel sad or empty	**0**	**1**	**2**	**3**
3	When I have a problem, I get a funny feeling in my stomach	**0**	**1**	**2**	**3**
4	I worry when I think I have done poorly at something	**0**	**1**	**2**	**3**
5	I would feel afraid of being on my own at home	**0**	**1**	**2**	**3**
6	Nothing is much fun anymore	**0**	**1**	**2**	**3**
7	I feel scared when I have to take a test	**0**	**1**	**2**	**3**
8	I feel worried when I think someone is angry with me	**0**	**1**	**2**	**3**
9	I worry about being away from my parents	**0**	**1**	**2**	**3**
10	I get bothered by bad or silly thoughts or pictures in my mind	**0**	**1**	**2**	**3**
11	I have trouble sleeping	**0**	**1**	**2**	**3**
12	I worry that I will do badly at my school work	**0**	**1**	**2**	**3**
13	I worry that something awful will happen to someone in my family	**0**	**1**	**2**	**3**
14	I suddenly feel as if I can't breathe when there is no reason for this	**0**	**1**	**2**	**3**
15	I have problems with my appetite	**0**	**1**	**2**	**3**
16	I have to keep checking that I have done things right (like the switch is off, or the door is locked)	**0**	**1**	**2**	**3**

NovoPsych

		Never	Sometimes	Often	Always
17	I feel scared if I have to sleep on my own	**0**	**1**	**2**	**3**
18	I have trouble going to school in the mornings because I feel nervous or afraid	**0**	**1**	**2**	**3**
19	I have no energy for things	**0**	**1**	**2**	**3**
20	I worry I might look foolish	**0**	**1**	**2**	**3**
21	I am tired a lot	**0**	**1**	**2**	**3**
22	I worry that bad things will happen to me	**0**	**1**	**2**	**3**
23	I can't seem to get bad or silly thoughts out of my head	**0**	**1**	**2**	**3**
24	When I have a problem, my heart beats really fast	**0**	**1**	**2**	**3**
25	I cannot think clearly	**0**	**1**	**2**	**3**
26	I suddenly start to tremble or shake when there is no reason for this	**0**	**1**	**2**	**3**
27	I worry that something bad will happen to me	**0**	**1**	**2**	**3**
28	When I have a problem, I feel shaky	**0**	**1**	**2**	**3**
29	I feel worthless	**0**	**1**	**2**	**3**
30	I worry about making mistakes	**0**	**1**	**2**	**3**
31	I have to think of special thoughts (like numbers or words) to stop bad things from happening	**0**	**1**	**2**	**3**
32	I worry what other people think of me	**0**	**1**	**2**	**3**
33	I am afraid of being in crowded places (like shopping centers, the movies, buses, busy playgrounds)	**0**	**1**	**2**	**3**
34	All of a sudden I feel really scared for no reason at all	**0**	**1**	**2**	**3**
35	I worry about what is going to happen	**0**	**1**	**2**	**3**
36	I suddenly become dizzy or faint when there is no reason for this	**0**	**1**	**2**	**3**

		Never	Sometimes	Often	Always
37	I think about death	**0**	**1**	**2**	**3**
38	I feel afraid if I have to talk in front of my class	**0**	**1**	**2**	**3**
39	My heart suddenly starts to beat too quickly for no reason	**0**	**1**	**2**	**3**
40	I feel like I don't want to move	**0**	**1**	**2**	**3**
41	I worry that I will suddenly get a scared feeling when there is nothing to be afraid of	**0**	**1**	**2**	**3**
42	I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order)	**0**	**1**	**2**	**3**
43	I feel afraid that I will make a fool of myself in front of people	**0**	**1**	**2**	**3**
44	I have to do some things in just the right way to stop bad things from happening	**0**	**1**	**2**	**3**
45	I worry when I go to bed at night	**0**	**1**	**2**	**3**
46	I would feel scared if I had to stay away from home overnight	**0**	**1**	**2**	**3**
47	I feel restless	**0**	**1**	**2**	**3**

Developer Reference:

Chorpita, B. F., Yim, L., Moffitt, C., Umemoto, L. A., & Francis, S. E. (2000). Assessment of symptoms of DSM-IV anxiety and depression in children: A revised child anxiety and depression scale. Behaviour research and therapy, 38(8), 835-855.