OKLAHOMA PEDIATRIC PSYCHOTROPIC MEDICATION RESOURCE GUIDE

2025 UPDATE



SPARK
STATEWIDE PSYCHIATRY ACCESS, RESOURCES AND KNOWLEDGE

OKLAHOMA STATE UNIVERSITY
CENTER FOR HEALTH SCIENCES

The UNIVERSITY of OKLAHOMA Health Sciences Center

OKLAHOMA Health Care Authority

OKLAHOMA Human Services

Background and Purpose

We are pleased to offer this updated version of the Pediatric Psychotropic Medication Resource Guide. In this updated guide you will find the most up-to-date information regarding psychiatric illnesses in pediatric patients. This guide is intended to provide support for medical providers caring for youth with psychiatric illnesses; but should not replace sound clinical judgment. We have updated resources and are including examples of "in-office techniques" to support the emotional well-being of youth in pediatric primary care settings. In addition, since the creation of our first guide we now have our State-Wide Child and Adolescent Psychiatry Access Program that clinicians can call Monday–Friday for access to a licensed mental health professional AND a child and adolescent psychiatrist.

SPARK STATEWIDE PSYCHIATRY ACCESS, RESOURCES AND KNOWLEDGE
POWERED BY OSU CENTER FOR HEALTH SCIENCES

The use of psychotropic medications for the treatment of youth with severe emotional and behavioral disturbances has increased dramatically over recent years. For instance, since the advent of atypical antipsychotics we have seen an increase in use up to 600%; compared to an increase in psychotherapy of 70% during that same time.[3] Oftentimes, youth with the most significant emotional and behavioral needs are prescribed the most medications; and yet are less likely to have seen a child and adolescent psychiatrist.[1] In one study of Medicaid claims, data indicates that as many as 67% of youth prescribed atypical antipsychotics reported quality of care concerns.[4] What is more, our most vulnerable children—in the state's child welfare system—are prescribed polypharmacy more often with limited oversight and continuity of care. These trends have led to a national discussion on the quality of care and treatment of our nation's vulnerable youth.[5] With overprescribing and, at times, imprudent use of medications, we put youth at risk for serious side effects and miss the opportunity to employ more evidence-based care.

Unfortunately, the need for quality diagnosis and treatment is increasing. Mental Health America indicates the rate of youth experiencing a mental health condition continues to rise, reporting nationally that from 2012 to 2017, the prevalence of Major Depressive Episode (MDE) increased from 8.66% to 13.01% of youth ages 12–17 and yet 70% of youth are still in need of treatment. In these reports, Oklahoma consistently ranks low compared with other states indicating that Oklahoma youth have higher prevalence of mental illness and lower rates of access to care.[2] The majority of youth who do receive treatment will receive it in their primary care office, with the American Academy of Pediatrics estimating that by 2020–2030 as many as 40% of patient visits to pediatricians will involve long-term chronic disease management of physical, psychological and behavioral conditions. Therefore, it is imperative that up-to-date evidence-based resources and collaboration is available to our clinicians on the front line of what at times can feel like a mental illness epidemic.

It is important to note that the majority of psychotropic medications are prescribed by clinicians with limited training in child and adolescent psychiatry, and Oklahoma is no exception. With the severe shortage of child and adolescent psychiatrists and limited access to evidence-based therapy, clinicians are doing what they can, with the information they know, to treat the symptoms of often devastating and destructive mental health symptoms in our youth. Unfortunately, these

interventions are often not-evidence based, masking the underlying disease state rather than treating the underlying problem. This can cause harmful and sometimes lifelong side effects including but not limited to tardive dyskinesia and metabolic syndrome. Judicious use of psychotropic medications is essential in the holistic well-being of the children of Oklahoma. With this need in mind, the Child and Adolescent Psychiatry Division of Oklahoma State University Center for Health Sciences has assembled a team of local experts to create and disseminate Pediatric Psychotropic Medication Resource Guide for Oklahoma youth.

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Oklahoma Pediatric Psychotropic Medication Task Force

Clinicians from Oklahoma State University Center for Health Sciences and University of Oklahoma Center for Health Sciences lead the core team. The core team invited task force members to participate in the drafting of the resource guide. Our task force consisted of child and adolescent psychiatrists, pediatricians and pharmacists who reviewed and compiled up-to-date information on best prescribing practices. Task force members were identified through their community standing and clinical expertise. Task force members were responsible for reviewing current research practices along with thoughtful clinical acumen to prepare the specific topics included in the resource guide. Through collaboration and consensus building, a first draft of the Oklahoma Pediatric Psychotropic Medication Resource Guide was developed. Subsequent revisions and input were completed to result in this final document.

The details in the original report rely on the most up-to-date evidence through December 2019. This most current version reviews the literature from 2017–2024 and was updated in collaboration with many original members of the taskforce. Although this resource is meant to aid in the diagnosis and treatment of children and adolescents, it is important to note that ultimately, the clinical decision making relies on the treating clinician and treatment team.

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General Principles and Monitoring

PRINCIPLE 1

Before initiating pharmacotherapy, a psychiatric evaluation is completed which should include a medical work up when indicated and collateral information (therapist, school, etc.). Best efforts should be made to obtain all past medical history for outpatient and inpatient treatment. **Specific questions about trauma and safety should be part of every assessment.**

Each clinician should determine their comfort diagnosing and treating based on their training and expertise. When indicated, clinicians should seek further consultation through available methods (e.g. SPARK and Project ECHO).

SPARK is Oklahoma's FREE Psychiatry Consultation Access Line. Our child and adolescent psychiatrists and mental health professionals are available Monday–Friday, 9:00 a.m.–5:00 p.m. for consultation on pediatric behavioral health cases, addiction medicine, maternal mental health and adult psychiatry. Consultation may include such topics as diagnostic considerations, medication management, or in-office interventions.

Project ECHO is a collaborative model of medical education that empowers clinicians in rural and underserved communities to provide specialty care to more people right where they live.

- SPARK 918-710-3600
- Pediatric Behavioral and Emotional Health ECHO
- Infant Mental Health ECHO

PRINCIPLE 2

Children and families from diverse backgrounds often face unique healthcare challenges, including limited access to providers and higher risks of medical or mental health issues. Some children also navigate differing values between home and school. Culturally aware mental health professionals work to understand and alleviate these stresses.

PRINCIPLE 3

The prescriber develops an interdisciplinary, psychosocial and psychopharmacological treatment plan based on the best available evidence. This should include feedback about the diagnosis. **For the majority of psychiatric diagnosis, behavioral therapy (including caregiver participation) is indicated as first-line treatment.**

PRINCIPLE 4

The prescriber develops a plan to monitor the patient and the treatment plan. This plan should include treatment response and side effects. Rating scales for disorders should be used as screeners and to ensure treatment response. Typically monitoring of mental health concerns should occur every week to two weeks at first, then monthly as symptoms stabilize to less frequent visits (e.g. every three to six months).

PRINCIPLE 5

Complete and document the assent of the child and consent of the parents before initiating medication treatment and during any changes in treatment. The assent and consent discussion should focus on the risks and benefits of the proposed and alternative treatments.

PRINCIPLE 6

Implement medication trials using an adequate dose and for an adequate duration of treatment. Document the side effects, treatment duration and treatment outcome. Document what constitutes a treatment failure (e.g. adequate trial to maximum dose without response; side effects intolerable although mild treatment response).

PRINCIPLE 7

The prescriber reassesses if the child does not respond to the initial medication trial as expected. Ensure the treatment is adhered to and the diagnosis is correct if the child is not responding to the treatment

PRINCIPLE 8

The prescriber needs a clear rationale for using medication combinations. If multiple medications are indicated, only one medication change should be made at a time unless clinically indicated. Other than cross-tapering,* there is no evidence to support the use of two medications from the same class being used simultaneously and should be avoided.

*The use of immediate release stimulants in addition to extended release stimulants is also an exception.

PRINCIPLE 9

Discontinuing medication in children requires a specific plan, which should include ongoing monitoring of return of symptoms. Depending on the diagnosis (e.g. depression, anxiety, ADHD) a discussion of when a medication would potentially be discontinued should be discussed (e.g. after six months to one year symptom free).

Discontinuing Medications

If the patient has shown a sustained period of remission or recovery and the prescriber believes the medication may no longer be necessary, a discontinuation trial may be clinically indicated. Before initiating a discontinuation trial, the plan for discontinuation is reviewed with the patient and family focusing on the risks of discontinuation (e.g., the risks for withdrawal symptoms and the risk for relapse or recurrence of symptoms) and the treatment plan if symptoms return. This is especially important if the patient was significantly impaired or suicidal before medication treatment. A specific plan for tapering and discontinuing medication and appropriate frequency of monitoring visits prevents withdrawal effects of medication and allows the clinician to identify early relapse or recurrence of symptoms. Monitoring children for a period of time after they are off medication allows for early identification of relapse or recurrence before symptoms become too severe.

During the discontinuation phase, patients may need to be seen more frequently than during the maintenance phase. Close monitoring as the dose of medication is being lowered, and for a period of time thereafter, ensures withdrawal symptoms and early signs of relapse or recurrence are identified quickly.

At this time, there is little or no data to suggest which medication to remove first in children who are taking multiple medications. Some clinical guidance might include:

- If a child is taking two medications that target the same disorder, the first medication to be removed would likely be the medication that was used adjunctively or as an augmenter.
- If a child is on two medications, where one is for the underlying disorder and the second is to manage side effects of the first, it is likely that the first to be removed is the one used to manage side effects.
- If a child is on two medications for two disorders, the first medication to be removed is for the disorder that is more likely to go into remission or which is less severe or impairing.

Criteria Indicating Further Review

- Absence of a thorough assessment for the DSM-5 diagnosis(es) in the child's medical record.
- Four (4) or more psychotropic medications prescribed concurrently (side effect medications are not included in this count).
- Prescribing of:
    - Two (2) or more concurrent stimulants*
    - Two (2) or more concurrent alpha agonists*
    - Two (2) or more concurrent antidepressants

- Two (2) or more concurrent antipsychotics
- Two (2) or more concurrent mood stabilizers

*The prescription of a long-acting and an immediate-release stimulant or alpha agonist of the same chemical entity does not constitute concomitant prescribing.

Note: When switching psychotropics, medication overlaps and cross taper should occur in a timely fashion, generally within four weeks.

- The prescribed psychotropic medication is not consistent with appropriate care for the patient's diagnosed mental disorder or with documented target symptoms usually associated with a therapeutic response to the medication prescribed.
- Psychotropic polypharmacy (two or more medications) for a given mental disorder is prescribed before utilizing psychotropic monotherapy.
- The psychotropic medication dose exceeds usual recommended doses (literature-based maximum dosages).
- Psychotropic medications are prescribed for children of very young age, including children receiving the following medications with an age of:
  - Stimulants: Less than three (3) years of age
  - Alpha Agonists Less than four (4) years of age
  - Antidepressants: Less than four (4) years of age
  - Mood Stabilizers: Less than four (4) years of age
  - Antipsychotics: Less than five (5) years of age
- Antipsychotic medication(s) prescribed continuously without appropriate monitoring of glucose and lipids at least every six months.
- Prescribing by a primary care provider who has not documented previous specialty training for a diagnosis other than the following (unless recommended by a psychiatrist consultant):
  - Attention Deficit Hyperactive Disorder (ADHD)
  - Uncomplicated anxiety disorders
  - Uncomplicated depression

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PSYCHIATRIC TREATMENT OF PRESCHOOL CHILDREN: BIRTH TO FIVE (5) YEARS OF AGE

Psychiatric Treatment of Preschool Children Birth to Five

CLINICAL PEARLS

- Children under the age of 6 have the highest rate of unmet mental health needs
- First line treatment for most psychiatric disorders in children birth to five include psychotherapy that includes the caregiver
- There continues to be a lack of research on the safety of psychotropic medication in preschool children.
- In addition to the DSM-V, the Developmental Disorders in Infancy and Early Childhood (DC:0-5TM) can be helpful in describing clinical syndromes of this age patient.
- Maternal/caregiver mental health is imperative for the wellbeing of the child. Efforts should be made to ensure caregivers emotional well being is being addressed.

RESOURCES

- Warmline
- SPARK
- Infant Mental Health ECHO

Be FOCUSED — Universally available opportunities to mitigate the risk of early childhood emotional and behavioral concerns

- Address unmet **B**asic Needs
- Consider **F**amily supports (including home visiting/MCIEHV)
- Safe, quality **O**ut-of-home childcare (e.g., Head Start)
- Refer for **C**aregiver depression or MH concerns
- Reduce exposure to **U**nnecessary medications with behavioral side effects (e.g., caffeine, steroids, over-the-counter medications)
- **S**leep hygiene
- **E**motion Labeling - teach words for feelings
- Link with **D**evelopmental supports including speech and language, OT (IDEA Part C or B)

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Anxiety in Young Children Ages 0–5

Age	Typical Fears	Clinical Pearl
0–6 months	Sudden loud noises, abrupt sensory changes	Driven by sensory reactivity. Soothing predictable caregiver is regulatory.
6–9 months	Stranger anxiety	This is a signal of healthy attachment. Reassurance to caregiver to alleviate caregiver anxiety/concern is recommended.
9–18 months	Separation anxiety	Developmentally appropriate until 2-3 years of age. Predictable routines reduce stress.
18 months–3 years	Fear of the dark, toileting, fear of animals	Avoidance that generalizes or escalates may warrant monitoring.
Age 3–5	Fear of the dark, fear of injury or bodily harm, worry about parent safety	Reassurance works better than logic, avoid reinforcing fears with excessive accommodation.

CLINICAL PEARLS

- Occurrence of anxiety disorders are found to be very similar to rates in older children and adolescents.[4]
- There is a scarcity of literature on pharmacological interventions for anxiety in young children, mainly case reports, which showed an increase in the amount of side effects with some anxiety symptom improvement.[6]

- As there are very effective psychotherapy treatments, pharmacological intervention should be rare in young children with anxiety disorders.[5, 7]
- Children under age 5 thought to have anxiety disorders, should be referred to an infant mental health care provider for evaluation and to provide a first-line therapy treatment.
- Parents of young children with anxiety disorders, often have anxiety as well. Treatment of parental anxiety can decrease the child's anxiety.[7]

RATING SCALES

- Spence Preschool Anxiety Scale
  - https://www.scaswebsite.com/portfolio/scas-pre-school-teacher-anxiety-scale/
- Survey of Well-Being of Young Children
  - Screens three domains—developmental, emotional and behavioral, and family context. Includes anxiety and internalization questions.
    - Includes the Baby Symptom Checklist for ages two months–18 months and the Preschool Pediatric Symptoms Checklist for ages 18–60 months.
  - https://www.floatinghospital.org/The-Survey-of-Wellbeing-of-Young-Children/Overview
- Strengths and Difficulties Questionnaire
  - Behavioral screening (emotion, conduct, hyperactivity, peer problems, prosocial behavior) for children over age two, includes anxiety and internalization questions.
  - https://www.sdqinfo.org/a0.html
- Children age 4 and over
  - Pediatric Symptoms Checklist
  - https://www.brightfutures.org/mentalhealth/pdf/professionals/ped_sympton_chklst.pdf

Treatment Approach for Preschool Children (3–5 Years Old)		
Hierarchy	**Treatment**	**Comments**
1st-Line Treatment	Family-based cognitive behavioral therapy (CBT)[6,1] Examples: • Being Brave: a program for coping with anxiety for young children and their parents.[8] • Timid to Tiger[8] • PCIT with adaptations: bravery directed interaction (BDI) module and the CALM and iCALM program[8]	Strong Recommendation
2nd-Line Treatment	Parent-only CBT for anxiety in young children Example: • BRAVE ONLINE[4]	Strong Recommendation
**There is limited evidence for use of medication for anxiety in young children. Therefore we highly encourage consultation with a child and adolescent psychiatrist prior to initiating medication.*		
3rd-Line Treatment	Fluoxetine[3,9] *Recommended starting dosage for young children is 2.5mg with slow titration.* Sertraline start 5mg po Qday	Opinion/Clinical Opinion
4th-Line Treatment	May consider escitalopram starting at .25mg po Qday	Opinion/Clinical Opinion

NOTE: For young children with sub-diagnostic levels of anxiety, preventative programs have been shown to be very effective, i.e. Cool Little Kids[2]

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Attachment Disorders (Disinhibited Social Engagement Disorder and Reactive Attachment Disorder) and Related Relationship Problems Ages 0–5

CLINICAL PEARLS

- Although attachment disorders are relatively uncommon, relationship problems between an infant or young child and the caregiver happen frequently.
- Primary care clinicians are important in early identification of relationship problems due to the ability to observe an infant or young child and caregiver over time.
- There are no medications to treat attachment disorders or relationship problems; however, there are effective evidenced-based therapy modalities that have been shown to be effective. Effective treatment requires the participation of a primary caregiver.
- Evaluations for attachment disorders should be done by an infant mental health trained clinician. Evaluations include specific relationship assessments.
- Treatment focuses on building the relationship of the infant or young child with the primary caregiver.
- It is important that the child has a consistent, safe attachment figure in order to improve.
- Congregate care can lead to a worsening of symptoms of attachment disorders and relationship problems.
- The Oklahoma Warmline (888-574-5437) or SPARK are available to help find treatment providers for infants and young children.

RATING SCALES

- There is no primary care screening tool for attachment disorders. There are relationship questions and environmental safety questions below that the clinician can use for decisions about referrals. These should be combined with observations made in the clinic of relationship concerns between the child and the parent.
    - Survey of Well-Being of Young Children
        - Screens three domains – developmental, emotional and behavioral, and family context, including attachment and safety questions.
        - https://www.floatinghospital.org/The-Survey-of-Wellbeing-of-Young-Children/Overview
    - Ages and Stages Social Emotional Developmental Screening (ASQ-SE)
        - Social emotional developmental screening tool

- Free for Oklahomans through www.sproutsdevelopment.com/
- https://agesandstages.com/

○ Bright Futures Pediatric Intake Form

- Screens for environmental and emotional risk factors in the home, which can lead to relationship problems.
- https://www.brightfutures.org/mentalhealth/pdf/professionals/ped_intake_form.pdf

○ Safe Environment for Every Kid

- Screens for environmental and emotional risk factors in the home, which can lead to relationship problems.
- https://mmcp.health.maryland.gov/epsdt/healthykids/Appendix2Risks%20Assessment%20Forms/Child%20Abuse%20Assessment%20(Seek%20Questionnaire).pdf

Treatment Approach for Attachment Disorders and related Relationship Difficulties in ages 0–5[1,10]

Hierarchy	Treatment	Comments
1st-Line Treatment	Attachment and Biobehavioral Catch-Up[1,2,3] Or Child Parent Psychotherapy[3,4,5]	Strong Recommendation/ Standard
2nd-Line Treatment	Other evidenced-based behavioral therapy with parent involvement, positive parenting interventions or social skills groups that include the parent.[3] • Circle of Security[9] • Promoting First Relationships[8] • Theraplay[7] • Mellow Babies[6]	Guideline
3rd-Line Treatment	• Adjunctive interventions for children who display aggressive and/or oppositional behavior that is comorbid with DSED[10]	Guideline Follow the resource guide for disruptive behaviors in young children

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Attention Deficit Hyperactivity Disorder 3–5 years

CLINICAL PEARLS

- Attention deficit hyperactivity disorder (ADHD) is the most common psychiatric disorder in young children ages three to five.
- ADHD symptoms must be present in more than one setting for the diagnosis to be made. If a child has behavior problems in primarily one setting, the symptoms can indicate a potential relationship problem as opposed to ADHD, and further evaluation is recommended.
- When symptoms of ADHD are present in young children ages three to five, and when these symptoms are functionally impairing, a referral should be made to a child psychiatrist and/or child psychologist. Non-child and adolescent psychiatrists can use the OSU Infant Mental Health ECHO, the OSU Pediatric Behavioral and Emotional Health ECHO, or SPARK for further consultation.
- First-line treatment is behavior therapy through parent management training, pharmacotherapy is typically reserved for severe cases. For instance, when safety is imminent or the child is at risk of exclusion from school.
- Preschool children are more likely to have side effects to stimulants and stimulants are not as effective in young children; such as emotional outbursts, irritability, difficulties sleeping, decreased appetite and weight loss.

RATING SCALES

- Vanderbilt Assessment Scale
  - Validated for ages six to 18; has been used clinically for preschoolers
  - Screening should be given to the caregiver as well as the childcare provider or another adult who spends a significant amount of time with the child other than the caregiver.
  - https://www.nichq.org/sites/default/files/resource-file/NICHQ-Vanderbilt-Assessment-Scales.pdf
- Survey of Well-Being of Young Children
  - Screens three domains—developmental, emotional/behavioral, and family context. Includes questions related to ADHD.

        - Includes the Baby Symptom Checklist for ages two months to 18 months and the Preschool Pediatric Symptoms Checklist for ages 18–60 months.
    - https://www.floatinghospital.org/The-Survey-of-Wellbeing-of-Young-Children/Overview
- Strengths and Difficulties Questionnaire
    - Behavioral screening (emotion, conduct, hyperactivity, peer problems, prosocial behavior) for children over the age of two. Includes questions related to ADHD.
    - https://www.sdqinfo.org/a0.html
- Children age four and over
    - Pediatric Symptoms Checklist
        - General screening that includes questions related to ADHD.
        - https://www.brightfutures.org/mentalhealth/pdf/professionals/ped_sympton_chklst.pdf

Treatment Approach for Preschool Children (3–5 Years Old)		
Hierarchy	**Treatment**	**Comments**
1st-Line Treatment	Parent Management Training for minimum of eight weeks.[2,5] 1. Positive Parenting Program (Triple P) 2. Incredible Years Parenting Program (Incredible Years) 3. Parent-Child Interaction Therapy (PCIT)	Strong Recommendation
2nd-Line Treatment	Parent Management Training not tried in 1st -line treatment for minimum of eight weeks[2,5]	Strong Recommendation
3rd-Line Treatment	Methylphenidate[1,2,3,6] monotherapy • Starting dose of MPH IR 2.5mg po QAM, increasing per practice guidelines	Strong Recommendation

4th-Line Treatment	Amphetamine Salts[2] • Starting dose of AMP IR 2.5mg po QAM, increasing per practice guidelines.	• Option/Limited evidenced-based research • Significant increase in diastolic blood pressure in children compared to adults.[1] • FDA approved for age three and up. Studies conducted on children ≥ five years old.[4]
5th-Line Treatment	Alpha Agonist[2] *Guanfacine 0.5mg po QHS, increasing per practice guidelines	• Option/Limited evidence-based research • Monitor blood pressure.
	Atomoxetine[2]	• Option/Limited evidence-based research • Approved in children six and older. Has been used in younger age groups, dosing based on weight. • Monitor weight and blood pressure changes.[1]

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Avoidant/Restrictive Food Intake Disorder (ARFID)

CLINICAL PEARLS

- Characterized by a persistent failure to meet appropriate nutritional and/or energy needs. Potentially resulting in significant weight loss, nutritional deficiencies, dependence on enteral feeding or oral nutritional supplements, and/or marked interference with psychosocial functioning.[1-2]
- ARFID is not associated with concerns about body weight or shape, which differentiates it from other eating disorders like anorexia nervosa.[3-4] The diagnosis of ARFID requires that the eating disturbance is not better explained by a lack of available food, a culturally sanctioned practice, or another medical or psychiatric condition. [2][5]
- Management of ARFID involves a multidisciplinary approach, including medical, nutritional, and psychological interventions. [6-7]
- Rating Scales
    - Nine Item ARFID Screen (NIAS)
        - https://pathwaysbc-production-content-item-documents.s3.amazonaws.com/documents/7515/original/NIAS%20Questionnaire.pdf?1698951104
- ARFID-Brief Screener (ARFID-BS)
    - https://staff.ki.se/sites/medarbetare/files/2023/08/ARFID-Brief%20Screener_EN.pdf

STAGE 1: IDENTIFICATION & SCREENING (PRIMARY CARE SETTING)

- Goals: Recognize potential ARFID, rule out medical causes, initiate referral if needed
- Rule out other causes:
    - GI disorders, allergies, Autism Spectrum Disorder (ASD), oral-motor issues
- Screen for comorbidities:
    - Anxiety, sensory issues, ASD, Attention Deficit Hyperactivity Disorder (ADHD)
- Initial caregiver education:
    - Normalize feeding difficulties without minimizing the concern
    - Explain that ARFID is treatable and not the result of “bad parenting”
    - Set expectations: multi-disciplinary support is often needed

STAGE 2: INITIAL MANAGEMENT & REFERRAL

- Goals: Stabilize medically, initiate assessment, and build therapeutic alliance.
- Refer to:
  - Pediatric dietitian for nutritional assessment
  - Pediatric psychologist/psychiatrist familiar with feeding/eating disorders
  - Feeding therapy (e.g., occupational therapy, speech-language pathology) if oral-motor or sensory issues are present
- Begin medical monitoring:
  - Weight, height, labs (CBC, CMP, iron, B12, vitamin D, zinc, etc.)
  - Vital signs, growth trajectory
- Family/Caregiver Education:
  - Validate the child's distress around food
  - Avoid pressure, coercion, or bribes to eat
  - Support structured, predictable mealtimes
  - Introduce the idea of exposure-based approaches to reduce fear or rigidity

STAGE 3: MULTI-DISCIPLINARY TREATMENT (COLLABORATIVE CARE)

- Goals: Address the core drivers of ARFID; promote nutritional variety and psychosocial functioning.
- PCP Role:
  - Coordinate care, track progress, and remain the central point of communication
  - Monitor physical health, reinforce team recommendations
  - Offer support and encouragement to families
- Team-Based Interventions:
  - CBT for ARFID (often the most evidence-based psych approach)
    - Focus on exposure to feared/avoided foods, building flexibility
    - Psychoeducation and coping strategies

- Feeding therapy:
  - Sensory integration
  - Oral motor skills
  - Desensitization strategies
- Dietitian input:
  - Nutrition goals and safe food bridging
  - Supplementation as needed

STAGE 4: MAINTENANCE & MONITORING

- Goals: Ensure sustained growth, nutrition, and psychosocial recovery.
- PCP Role:
  - Continue regular follow-up (monthly or quarterly depending on progress)
  - Support return to normal social functioning (school meals, family events)
  - Monitor for relapse or new food avoidance patterns
  - Provide booster education for caregivers and schools as needed

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Bipolar Disorder in Young Children

CLINICAL PEARLS

- There is no clear consensus about the diagnosis of bipolar disorder in children under age five, and it is thought to be rare.
- A comprehensive assessment by a child psychiatrist or child psychologist specializing in young children is most appropriate when young children exhibit mania symptoms. In this age group there are many differential diagnoses and comorbidities to assess (i.e. ADHD, ODD, depression, anxiety). Clinicians can utilize the OSU Infant Mental Health ECHO, the OSU Pediatric Behavioral and Emotional Health ECHO, or SPARK for additional consultation..
- Mania is this age group is also thought to have rapid cycling more commonly.
- There is limited evidence in this age group for treatment of bipolar disorder. As such, therapy should be first line to avoid potential side effects of psychotropic medications.
- Treatment should always involve the family.

RATING SCALES

- There is no bipolar disorder-specific screening for children up to age five. General symptoms screenings can be used to determine the need for a referral for further evaluation.
    - Survey of Well-Being of Young Children
        - Screens three domains – developmental, emotional/behavioral, and family context, including externalization and internalization questions.

- Includes the Baby Symptom Checklist for ages two months to 18 months and the Preschool Pediatric Symptoms Checklist for ages 18–60 months.
- https://www.floatinghospital.org/The-Survey-of-Wellbeing-of-Young-Children/Overview

○ Strengths and Difficulties Questionnaire

- Behavioral screening (emotion, conduct, hyperactivity, peer problems, prosocial behavior) for children over age two.
- https://www.sdqinfo.org/a0.html

○ Children age four and over

- Pediatric Symptoms Checklist
- https://www.brightfutures.org/mentalhealth/pdf/professionals/ped_sympton_chklst.pdf

Treatment Approach for Preschool Children (3–5 Years Old)		
Hierarchy	**Treatment**	**Comments**
1st-Line Treatment	Psychosocial Interventions[3]	Strong Recommendation (empirical evidence or strong clinical consensus)
2nd-Line Treatment	Evidence-Based Therapy: • Child and Family-Focused Cognitive-Behavioral Treatment[3] • Family-Focused Therapy[3] • Multifamily Psychoeducation[3]	Strong Recommendation (empirical evidence or strong clinical consensus)
Re-evaluation by a child psychiatrist should be done if the above therapies are ineffective. Providers can call SPARK at 918-710-3600 for additional guidance.		

*Because of the current level of evidence for bipolar disorders in young children, other guidelines may need to be considered (i.e. Disruptive Behavior Disorders.[1,2,4,5,6])

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Depression 3–5 years

CLINICAL PEARLS

- The presence of preschool depression can be an indicator of increased risk for Major Depressive Disorder (MDD) in adolescence.[1]
- Prevalence of depression in preschoolers is approximately 2%.
- Psychotherapy is first and second-line treatment options and children should be referred to an infant mental health provider for further evaluation and treatment.
- Medications should be considered a last resort for depressed preschoolers who continue to have severe and impairing psychopathology after failing an adequate course of therapy.[2,3,5]
- Clinicians can use the OSU Infant Mental Health ECHO, the OSU Pediatric Behavioral and Emotional Health ECHO, or SPARK for further consultation.

RATING SCALES

- Preschool Feelings Checklist
  - A brief and valid screening measure for depression in young children.
  - https://medicine.tulane.edu/sites/g/files/rdw761/f/pictures/Preschool%20feelings%20checklist.pdf
- Survey of Well-Being of Young Children
  - Screens three domains—developmental, emotional/behavioral, and family context. Includes depression and internalization questions.
    - Includes the Baby Symptom Checklist for ages two months to 18 months and the Preschool Pediatric Symptoms Checklist for ages 18–60 months.
  - https://www.floatinghospital.org/The-Survey-of-Wellbeing-of-Young-Children/Overview
- Strengths and Difficulties Questionnaire
  - Behavioral screening (emotion, conduct, hyperactivity, peer problems, prosocial behavior) for children over age two, including depression and internalization questions.
  - https://www.sdqinfo.org/a0.html
- Children age four and over
  - Pediatric Symptoms Checklist
    - https://www.brightfutures.org/mentalhealth/pdf/professionals/ped_sympton_chklst.pdf

Treatment Approach for Preschool Children (3–5 Years Old)

Hierarchy	Treatment	Comments
1st-Line Treatment	Psychotherapy – Parent-Child Psychotherapy Targeting Emotion Development (PCIT-ED)[3,4,5]	Strong Recommendation
2nd-Line Treatment	Play Therapy or Cognitive Behavioral Therapy with the caregiver[2]	Opinion/limited evidence-based research for age group
Re-evaluation by a child psychiatrist should be done if the above therapies are ineffective.		
3rd-Line Treatment	Fluoxetine[2,6] • starting dose 2.5-5mg daily, increasing per practice guidelines	Opinion/limited evidence-based research for age group FDA Black box warning: SSRI increases the risk for suicidal thinking.

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Disruptive Behavior Disorders in Young Children (i.e. Oppositional Defiant Disorder)

CLINICAL PEARLS

- Disruptive behavior problems in young children are the number one reason for referral to mental health agencies.
- Evidence-based behavioral interventions with the family have been shown to be very effective for disruptive behavior disorders in young children.
- If the trial of evidence-based therapy for behavioral problems in young children is ineffective, then the diagnoses and formulation should be reassessed. Behavior problems are symptoms of the primary issue – mental health or environmental – and evaluation should be done by a mental health professional specializing in young children before moving to the psychopharmacological treatment step.
- Parental mental health should be assessed and addressed as well because parental symptomatology often affects their child's symptoms.
- Disruptive behavior could be indicative of underlying trauma or abuse and this should be evaluated.

- Clinicians can utilize the OSU Infant Mental Health ECHO, the OSU Pediatric Behavioral and Emotional Health ECHO, or SPARK for further consultation.

RATING SCALES

- Survey of Well-Being of Young Children
  - Screens three domains – developmental, emotional/behavioral, and family context. Includes disruptive behavior questions
    - Includes the Baby Symptom Checklist for ages two months to 18 months and the Preschool Pediatric Symptoms Checklist for ages 18-60 months.
  - https://www.floatinghospital.org/The-Survey-of-Wellbeing-of-Young-Children/Overview
- Strengths and Difficulties Questionnaire
  - Behavioral screening (emotion, conduct, hyperactivity, peer problems, prosocial behavior) for children over the age two.
  - https://www.sdqinfo.org/a0.html
- Children age four and over
  - Pediatric Symptoms Checklist
    - https://www.brightfutures.org/mentalhealth/pdf/professionals/ped_sympton_chklst.pdf

Treatment Approach for Preschool Children (3–5 Years Old)		
Hierarchy	**Treatment**	**Comments**
1st-Line Treatment	Evidence-based behavioral intervention with a family approach: • Parent Child Interaction Therapy (PCIT)[1,7] • Triple P—Positive Parenting Program[7,9] • Incredible Years [4,7]	Strong Recommendation/ Standard

2nd-Line Treatment	Other evidenced-based behavioral therapy with parent involvement, positive parenting interventions, or social skills groups that include the parent.[7]	Strong Recommendation/ Standard
3rd-Line Treatment -With comorbid ADHD	Methylphenidate [2,6] *starting dose of MPH 2.5mg po QAM increasing per practice guidelines.	Guideline Follow the ADHD guidelines for young children.
Re-evaluation by a child psychiatrist should be done if the above therapies are ineffective		
4th-Line Treatment -without comorbid ADHD	Risperidone [3,5,8] *starting does of risperidone 0.125mg po QHS increasing per practice guidelines. or Aripiprazole Initial dose of 0.2mg po Qday increasing per practice guidelines	Guideline Metabolic and EPS monitoring is required with atypical antipsychotics. • Lab work: CBC, CMP, lipids. • Abnormal Involuntary Movement Scale every six months if normal. • Weight/height monitoring Prolactin – there are differences of opinion as to whether this should be followed before puberty.

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Obsessive Compulsive Disorder (OCD) in Children 0–5

CLINICAL PEARLS

- Symptoms of OCD can appear as early as two years old but cannot be diagnosed until age three. The diagnosis of OCD is more reliable between the ages four and five years.
- The estimated prevalence in children ages five to seven years is 0.01%, compared to general pediatric patients at 0.5-4.0%.
- Pre-pubertal onset is more common in boys than girls, in the ratio of 2–3:1.
- OCD is diagnostically challenging as symptoms can overlap with other diagnoses such as autism.
- A consult or evaluation by a child psychiatrist or a child psychologist should be done if it is thought that a young child may have OCD.
- Clinicians can utilize SPARK, the OSU Infant Mental Health ECHO or the OSU Pediatric and Behavioral Health ECHO for further consultation.
    - OSU ECHO Lines
    - SPARK

RATING SCALES

- Spence Preschool Anxiety Scale
    - https://www.scaswebsite.com/portfolio/scas-pre-school-teacher-anxiety-scale/
    - General anxiety screening tool that has questions related to OCD.
- Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS) symptom checklist.
    - https://www.mcpap.com/pdf/CYBOCS.pdf
    - Note: this scale is typically given by mental health professionals.

Treatment Approach for Preschool Children (3–5 Years Old)		
Hierarchy	**Treatment**	**Comments**
1st-Line Treatment	Family-based exposure/response prevention therapy (E/RP)[5,7,9] Family-based Cognitive Behavioral Treatment[3]	Strong Recommendation
2nd-Line Treatment	Family-Based Relaxation Therapy[4,6]	Strong Recommendation

An evaluation by a child psychiatrist should be done prior to prescribing antidepressants in preschoolers		
3rd-Line Treatment	Fluoxetine[1,2,8] *starting dose of fluoxetine 2.5-5mg po Q day, increasing per practice guidelines.	Opinion/Clinical Opinion There is limited evidence for use of medication for OCD in young children. FDA black box warning: SSRIs increase the risk of suicidal thinking.
4th-Line Treatment	Sertraline[9] Starting dose of sertraline 5mg po Qday increasing per practice guidelines.	Opinion/Clinical Opinion There is limited evidence for use of medication for OCD in young children. FDA black box warning: SSRIs increase the risk of suicidal thinking. Sertraline liquid is in a concentrated form and must be diluted per instructions.
5th-Line Treatment	May consider escitalopram starting at 0.25mg po Qday.	Opinion/Clinical Opinion

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- Illinois Guidelines for Prescribing Psychotropic Medication to Preschool Age Children (3–5 Years Old). (2016).

Post-Traumatic Stress Disorder (PTSD) and Trauma in Children 0–5

CLINICAL PEARLS

- In Diagnostic and Statistical Manual of Mental Disorders (DSM-5), the diagnosis of "Post-traumatic stress disorder for children 6 and younger" was added due to the strength of evidence that PTSD symptoms and treatment look different in children younger than age six.
- There is no evidence to support the use of medications for PTSD and trauma in young children, and this practice should be avoided based on the strength of evidence for certain therapies.
    - Comorbid conditions should be treated as well, and these conditions may have supporting evidence for psychotropic use.
- There is strong evidence that evidence-based therapies are effective for PTSD and trauma in this age group. Effective treatment requires the participation of a primary caregiver.

- Trauma should be screened for at well-child checks and any time there is a safety concern for the child. If there is a concern for trauma and/or PTSD in infants and young children, referrals for further evaluation should be made to a trained infant mental health clinician.
- In Oklahoma, every adult is a mandated reporter; if you suspect a child is a victim of abuse, neglect or exploitation, call the child abuse reporting hotline at 800-522-3511.
- The Oklahoma Warmline (888-574-5437) is available to help find treatment providers for infants and young children.

RATING SCALES

- Questions regarding trauma and abuse are found in many developmental screeners. It is recommended that the developmental, emotional/behavioral symptoms and family/environmental context are all screened. If there is concern for trauma symptoms in the child based on observation or initial screening, follow-up screening using the Young Child PTSD Checklist is recommended. In addition, if there is concern, the young child should be referred to an infant mental health provider.
    - Survey of Well-Being of Young Children
        - Screens three domains—developmental, emotional/behavioral, and family context, including safety questions.
        - https://www.floatinghospital.org/The-Survey-of-Wellbeing-of-Young-Children/Overview
    - Bright Futures Pediatric Intake Form
        - Screens for environmental and emotional risk factors in the home, which can lead to trauma and PTSD.
        - https://www.brightfutures.org/mentalhealth/pdf/professionals/ped_intake_form.pdf
    - Safe Environment for Every Kid
        - Screens for environmental and emotional risk factors in the home, which can lead to trauma and PTSD.
        - https://mmcp.health.maryland.gov/epsdt/healthykids/Appendix2Risks%20Assessment%20Forms/Child%20Abuse%20Assessment%20(Seek%20Questionnaire).pdf
    - Young Child PTSD Checklist
        - 42-question screening specific to PTSD for children ages one to six years.
        - https://medicine.tulane.edu/sites/g/files/rdw761/f/YCPC_v5_23_14.pdf

Treatment Approach for PTSD and Trauma in Ages 0–5		
Hierarchy	**Treatment**	**Comments**
1st-Line Treatment	Evidence-based dyadic treatment for PTSD and/or trauma in young children: • Attachment and Biobehavioral Catch-Up[1,2,5] • Child Parent Psychotherapy[3,5,6,7] • Preschool PTSD Treatment[3,5,9]	Strong Recommendation/Standard
2nd-Line Treatment	Treatment not used in 1st-line.	Strong Recommendation/Standard
3rd-Line Treatment	Other evidence-based trauma treatment for young children: • Stepped Care TFCBT[8]	Guideline
4th-Line Treatment	• Dyadic Play Therapy[3]	Clinical Opinion
5th-Line Treatment	Alpha agonist[4] • Guanfacine 0.5mg po QHS, titrate per practice guidelines	Clinical Opinion Literature is scarce on using alpha agonists in young children, but this practice is widely used for severe hyperarousal symptoms and nightmares in children ages 3–5 if other treatments have failed.

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- Illinois Guidelines for Prescribing Psychotropic Medication to Preschool Age Children (3–5 Years Old). (2016).

PSYCHIATRIC TREATMENT OF CHILDREN AND ADOLESCENCE: 5–17 YEARS OF AGE

Aggression

CLINICAL PEARLS

- In differentiating normal aggression from pathological aggression, it is important to note the intensity, frequency, impairment and course.[7]
- Aggression can be a symptom of many psychiatric disorders. Appropriate assessment should be conducted prior to treating the symptom of aggression. In many instances treating the primary psychiatric disorder will improve aggressive symptoms (e.g. ADHD treatment with stimulants).
- Aggression is often described as the "fever" of child and adolescent psychiatry. Understanding the cause of aggression is imperative in its treatment. A thorough assessment includes gathering a detailed history of the child including symptom onset, illness course and intervention outcomes.
- Use of medication on a "stat"or "p.r.n." basis should not be considered a standard treatment of youth manifesting aggressive and disruptive behaviors.[8]
- Trauma history must be included and correlated with symptomatology in collaboration with a responsible adult who knows the child well.

Assessing Aggression: BOLDER

B – Behavior: In what ways does the child exhibit aggression?

O – Onset: When does it happen? What triggers it and why?

L – Location: Where do the symptoms occur – home/school?

D – Duration: How long does it last?

E – Exacerbants: What makes it worse?

R – Relief: What makes it better?

DIFFERENTIAL DIAGNOSIS

- Mood Disorder (major depressive disorder, disruptive mood dysregulation, bipolar disorder)
- Autism Spectrum Disorder
- Generalized Anxiety Disorder
- Psychotic Disorders
- Conduct Disorder
- Oppositional Defiant Disorder
- Impulse Control Disorder
- ADHD
- Trauma Related and Attachment Disorders
- Substance Abuse Disorder

RATING SCALE

- Modified Overt Aggression Scale (MOAS)
  https://www.thereachinstitute.org/wp-content/uploads/2021/06/MOAS.pdf

SCREENING AND ASSESSMENT

Complete diagnostic assessment as referenced in the clinical pearls.

- Use MOAS scale to establish baseline.
- Refer to higher level of care if life-threatening behavior is present.
- Provide supportive educational material to the family.

EVALUATION AND TREATMENT APPROACH

Stage 1	Treat the primary diagnosis and any comorbid conditions (see guidelines for specific disorder). **ASSESS AND DEFINE TARGET SYMPTOMS AND BEHAVIORS IN PARTNERSHIP** • Assess the behavior of the child,towards him/herself and others. • Determine the frequency and intensity of the symptoms, and how the child experiences them • Identify symptom triggers and coping mechanisms the child uses to counter the symptoms • Identify the symptoms of aggression that are most likely to respond to a specific treatment • Include the family's input to ensure their participation throughout treatment and management planning	Please review table 1 for help with diagnostic clarity in the context of aggression. Treating the underling psychiatric should be the first step.
Stage 2	Continue monitoring progress with standardized scale (MOAS). Begin therapeutic intervention correlated to patient age, cognitive ability and nature of the etiology of aggression: • Applied Behavioral Analysis (ABA) • Cognitive Behavioral Therapy (CBT) • Family Therapy • Multi-systemic Therapy • Parent-Child Interaction Therapy (PCIT) • Parent Management Training (PMT)	

If safety **IS NOT** of immediate concern	1. Consider use of Guanfacine 1mg po Qday, increasing by 1mg po Q 1-2 weeks up to 2-3mg (25-33.9KG) and 2-4mg (34-41.4kg) 2. **IF** Guanfacine is Not effective, can trial Clonidine 0.1mg po QHS increasing by 0.1mg po Q 1-2 weeks, divided in BID-QID dosing not to exceed 0.2mg (27kg-40.5kg) and 0.3mg (40.5kg -45kg)	Both Guanfacine and Clonidine can lower blood pressure and vitals should be monitored. Patients and families should be cautioned about risk of rebound hypertension if missed dosages
If safety **IS** of immediate concern	1. Consider a Second Generation Antipsychotics (SGA): risperidone (or) aripiprazole Risperidone can be started at 0.5mg po Qday and increased by 0.25mg po Q day (15-20kg) and 0.5mg po Q day (>20kg) every 2 weeks for a max dose of 3mg po Qday. Dosages can be divided in BID dosing. Aripiprazole can be started at 2mg po Qday and can be increased to 5mg po Qday after 1-2 weeks. Can increase by 5mg po q day every 2 weeks up to 15mg po Qday 2. If first trial of SGA is not helpful try the alternative (e.g. rispiridone or aripiprazole)	Although the evidence is strongest for atypical antipsychotics and there is FDA indication for irritability with autistic disorder their side effect profile (e.g. metabolic syndrome, gynecomastia) is concerning. Metabolic monitoring is essential in prescribing these medications. Treatment with Second generation antipsychotics should be time limited and occur in the context of ongoing behavioral therapy.
If Safety **IS** of Immediate concern **AND** Partial response to Atypical	• Ensure optimal dose in SGA (e.g. symptoms have improved, tolerability limits further increase, ceiling dose without further improvement is obtained. • Consider adding a mood stabilizer Lithium or Depakote	Lithium is considered Level A evidence, while Depakote is Level B. Depakate is contraindicated in females of child-bearing age

If Safety **IS** of Immediate concern and no response to above	• Can consider use of level B evidence • SGAs: quetiapine, olanzapine, ziprasidone	Avoiding polypharmacy when possible. Limited Data to support dosing regimens, please contact our Child and Adolescent Psychiatry Consultation line for additional guidance SPARK
Additional Strategies	If symptoms are not improved, consider replacing/ augmenting with level C evidence drugs: • SGAs: paliperidone • Mood stabilizers: carbamazepine • Beta-blocker: propranolol If symptoms are not improved, consider augmenting/ replacing with level D evidence drugs: • SGAs: lurasidone, asenapine	Avoiding polypharmacy when possible. Limited Data to support dosing regimens, please contact our Child and Adolescent Psychiatry Consultation line for additional guidance SPARK

Level of Evidence
A = Two randomized controlled trials (RCTs) or more
B = Small RCTs of more than one open-label study
C= Open-label or case series
D= Pediatric trials assessing tolerability

AGGRESSION PSYCHOPHARMACOLOGY*

- Avoid polypharmacy if possible
- Before adding additional medications, check for:
  - Adherence to medication
  - Proper dosing
  - Accuracy of the diagnosis

- Previously unknown comorbidities
- New or chronic psychosocial stressors
- Therapy adherence

*If medication is prescribed strictly for managing aggression not associated with mood or psychotic symptoms and there has been six months of symptom remission, consider a slow taper and discontinue medication.

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OTHER RESOURCES

- *Parent Management Training*, by Alan E. Kazdin, PhD
  https://alankazdin.com/portfolio-items/parent-management-training/
- *The Explosive Child*, by Ross W. Greene, PhD
  https://thereachinstitute.org/wp-content/uploads/2021/08/T-MAY-final.pdf

Treatment of Anxiety Disorders in Children Age 6–18 years

- Generalized Anxiety Disorder (GAD) (lasting six months or longer)
- Separation Anxiety Disorder (developmentally inappropriate; lasting at least four weeks)
- Social Anxiety (lasting six months or longer)
- Specific Phobias (lasting six months or longer)
- Panic Disorder (rare in children before adolescence)

CLINICAL PEARLS

- Anxiety disorders are the most common psychiatric disorder in children and adolescents, affecting between 15–20% of youth. The USPSTF recommends universal screening for youth 8-18 which helps with early identification.[10]
- Anxiety in youth may present as crying, irritability, angry outbursts, oppositionality or disobedience.
- First-line treatment is psychotherapy (mild-moderate) and/or psychotropic medications (if severe or unresponsive to therapy).
- One anxiety disorder is highly comorbid with other anxiety disorders.
- Additional psychiatric disorders frequently develop by late adolescents or early adulthood such as depression and substance use disorders.
- Parental anxiety can be a contributing factor to anxiety in youth; and if youth anxiety is not improving, treating of parental/caregiver anxiety may be indicated.
- Low to moderate exercise has been shown to improve anxiety.[11]

RATING SCALES/SCREENING TOOLS

- Screening for Child Anxiety Related Disorders (SCARED) for children under eight years old. https://www.aacap.org/App_Themes/AACAP/docs/member_resources/toolbox_for_clinical_practice_and_outcomes/symptoms/ScaredChild.pdf
- Kutcher Generalized Social Anxiety Disorder Scale for Adolescents (K-GSADS-A) for ages 11–17. http://teenmentalhealth.org/product/kutcher-generalized-social-anxiety-scale-adolescents-kgsads/

EVALUATION AND TREATMENT APPROACH

Stage 1A: Screening: early intervention and prevention offers a proactive method for alleviating symptoms and may improve long-term functioning.

Stage 1B: Differential diagnosis (DSM-5 criteria)

- Other psychiatric disorders, physical condition and medication-induced anxiety should be ruled out, as some have similar symptoms.
    - Psychiatric disorders with similar symptoms can include ADHD, neurodevelopmental disorders, learning disabilities, bipolar disorder, depression and psychotic disorders.
    - Physical conditions which may mimic anxiety include hyperthyroidism, caffeinism, migraines, asthma, seizure disorders and lead intoxication.
    - Medications that may induce anxiety symptoms include anti-asthmatics, steroids, SSRIs, sympathomimetics and antipsychotics.

Stage 1C: Assess severity and impairment to guide treatment options.

Stage 2A: Parent and child education about anxiety disorders (see resource for Child Mind Institute and Seattle Children's below).

Stage 2B: Mild-to-Moderate Impairment.

- First-line treatment should be psychotherapy.
    - Cognitive Behavioral Therapy (CBT)
- Second-line treatment should be considered if adequate relief of symptoms has not occurred after adequate trial of psychotherapy.
    - Selective Serotonin Reuptake Inhibitors (SSRIs)* (fluoxetine, sertraline and escitalopram)[2]
        - Start at low dose and if there is no significant improvement after four weeks of therapy increase dose.

Black Box Warning: children and adolescents have an increased risk of suicidal ideations at therapy initiation and patients should be monitored closely.

Stage 2C: Moderate-to-Severe Impairment.

- Combination CBT and psychotropic medication.
- Psychotropic medications*
  - First-line is an SSRI (fluoxetine, sertraline, escitalopram)[2]
  - Second-line is a different SSRI
    - To avoid polypharmacy slowly titrate down dose of first SSRI while titrating up second SSRI
  - Third-line is a Serotonin Norepinephrine Reuptake Inhibitor (SNRI)
    - Third line due to increased risk of more severe Adverse Events (AEs) such as weight loss, nausea, dizziness, palpitations or oropharyngeal pain
- Not Recommended.
  - Tricyclics are no longer recommended because of cardiac monitoring requirements and a greater risk for overdose. May consider if other therapies are not working.
  - Benzodiazepines have shown no benefits in clinical trials.
  - Buspirone has shown small benefits in adults, but no evidence in children.

Stage 3: When to stop therapy.

- No good clinical studies on when to stop therapy.
- Consider stopping therapy at nine to 12 months during a period of low stress and anxiety.
- When stopping SSRIs and SNRIs the dose should be decreased gradually over time (phased decrease in dosage with several weeks between adjustments).
- CBT "boosters" may be helpful to maintain remission and symptom relief.

Medication	Anxiety Disorders	Age	Dose¥	FDA Approval
SSRI				
Fluoxetine*	GAD, SoP, SAD[4]	7–17	Initial Dose: 10 mg/day x 1 week, then increase to 20 mg/day; 20 mg/day should be adequate for most children, higher doses may be necessary individual cases[4]; maximum dose: 60 mg/day[5]	No

Fluvoxamine*	GAD, SoP, SAD[6]	6–17	Starting dose of 25 mg/d at bedtime increase by 50 mg/day every 2 weeks as needed based one response (doses over 50 mg should be divided into 2 doses with larger dose at bedtime) Maximum dose: 250 mg/d children; 300 mg/d adolescents[6]	No
Sertraline*	GAD, SoP, SAD[7]	7–17	Starting dose 25 mg/day for at least 1 week then increase by 25 mg/d based on response; max dose 200 mg/d[7]	No
Escitalopram	GAD	7–17	Start 5mg po Qday for 2 weeks then increase by 5mg po Q 4 weeks until remission of symptoms, up to 20mg po Qday	Yes
SNRI				
Duloxetine**	GAD	7–17	Starting dose 30 mg/d increase by 30 mg/day every 2 weeks as tolerated and based on response. Maximum dose: 120 mg/d	Yes
Venlafaxine ER*	GAD, SoP[8,9]	6–17	37.5 mg/d titrated up to 2.6-3.0 mg/day based on weight (max dose of 225 mg ≥ 50kg)[8,9]	No
Drizalma (duloxetine) delay	GAD	7–18	30mg po Qday, may increase by 30mg/day after 2 weeks. Max 120mg po Qday	Yes

SSRI=Selective Serotonin Reuptake Inhibitor, SNRI=Serotonin Norepinephrine Reuptake Inhibitor, TCA=Tricyclic Antidepressant; GAD=Generalized Anxiety Disorder, SoP=Social Phobia, SAD=Separation Anxiety Disorder

¥Dosing should always start at the low dose and be titrated up slowly in absence of response and toxicity

*Based on information from clinical studies

**Based on information from the FDA approved label

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OTHER RESOURCES

- National Alliance on Mental Illness (NAMI) Anxiety Disorders Support https://www.nami.org/Learn-More/Mental-Health-Conditions/Anxiety-Disorders/Support
- American Academy of Child and Adolescent Psychiatry (AACAP) https://www.aacap.org/AACAP/Families_and_Youth/Resource_Centers/Anxiety_Disorder_Resource_Center/Home.aspx
- Child Mind Institute For Families https://childmind.org/topics/concerns/anxiety/
- Seattle Children's FAST resources https://www.seattlechildrens.org/healthcare-professionals/community-providers/fast/parents-caregivers/

Attention Deficit Hyperactivity Disorder

CLINICAL PEARLS

- Recent meta-analysis calculated a pooled worldwide ADHD prevalence of 7.2% among children and is considered the most common neurobehavioral disorder in childhood.
- Children and adolescents presenting with behavioral symptoms concerning for ADHD should be screened for trauma. If concerns for traumatic stress exist, evidence-based therapy to address the trauma should occur.
- It is also important to rule out additional causative factors including but not limited to: seizure, elevated lead levels, vision, hearing, thyroid, hepatic, substance abuse, etc.
- Learning and language problems are common comorbid conditions with ADHD.
- To diagnose ADHD, the clinician should determine that DSM-5 criteria have been met, including documentation of symptoms and impairment in more than one major setting (i.e., social, academic or occupational), with information obtained primarily from reports from parents or guardians, teachers, other school personnel, and mental health clinicians who are involved in the child or adolescent's care.
- If diagnosis is unclear, referral for psychological testing may be indicated prior to initiating medications.

MGH Cardiovascular Screen			
Targeted Personal History	Yes	No	Comment
Previously detected cardiac disease (congenital or acquired; heart murmur)			
Syncope, dizziness (particularly with exercise)			
Chest pain, shortness of breath, exercise intolerance			
Palpitations, heart racing, frequent skipped beats			
Family Cardiovascular History			
Sudden or unexplained death or event requiring resuscitation (children, young adults)			
Early onset cardiac disease (MI<35 years old, cardiomyopathy)			
Arrhythmias (e.g. Wolf-Parkinson-White)			
Long QT syndrome			
Data			
Blood pressure, heart rate normalw			

A positive response does not negate the use of medications; however, if suggestive of cardiovascular disease, it is recommended to refer the child to a primary care physician or pediatric specialist (e.g. cardiology) for further assessment.

FIRST-LINE TREATMENTS (DETAILED APPROACH BELOW):

- Age 6–11: FDA-approved medication with behavioral therapy (e.g. parent management training).
- Age 12–17: FDA-approved medication; add behavioral therapy if insufficient response.

Insufficient response: Rule out lack of adherence at every stage

Comparative effectiveness:

- All stimulants ~1.0
  For stimulant medications it is about finding the right medication at the right dose and the right time. Sometimes small adjustments in dosing (e.g. 5mg increase to 7.5mg) or timing (e.g. Moving PM dose from 1pm to 12pm) can aid in symptom control.
- Atomoxetine ~0.7
- Guanfacine ~0.65

- New Digital Tools Specifically Endeavour RX is FDA approved for treatment of ADHD (https://www.endeavorrx.com/)[10]
- Micronutrients have limited data to support symptom improvement with ADHD; however, the out of pocket expense and dosing schedule is limiting for many families[11]

Insufficient evidence for:

- Imaging or electroencephalogram to diagnose ADHD in children 7 to 17 years of age
- Omega-3/6 supplementation

RATING SCALE:

Use validated instrument: must include DSM-5 criteria:
https://www.cdc.gov/ncbddd/adhd/diagnosis.html

Conners' Comprehensive Behavior Rating Scales and the ADHD Rating Scale IV are the only scales validated for preschool-aged children:
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3279732/pdf/nihms-345276.pdf
https://depts.washington.edu/dbpeds/ADHD_Care_Guide(BobHilt2014).pdf
(also includes Vanderbilt rating scale)

Vanderbilt ADHD Assessment scale
https://www.nichq.org/sites/default/files/resource-file/NICHQ_Vanderbilt_Assessment_Scales.pdf

Treatment Approach: Pharmacotherapy			
	No contributory comorbidities	**Hypertension**	**Anxiety, tics, active substance abuse**
Stage 1	MPH or AMP (titration weekly to effect, or max recommended dose)	α-2 (age 6–17 only, titration every 3–4 weeks to effect, or max recommended dose)	ATX (age 6–17 only, titration every 2–4 weeks to effect, or max recommended dose)
Stage 2	MPH or AMP (not used in Stage 1)	α-2 (not used in Stage 1) or ATX	α-2 (if substance abuse) or MPH, or AMP (monitor comorbidity, titrate off ATX)
Stage 3	MPH or AMP (not used in Stage 1 or 2)	MPH or AMP +/- α-2 (monitor HTN, titrate off ATX)	α-2 (not used in Stage 2) or MPH or AMP (not used in Stage 2) (monitor comorbidity)

Stage 4	MPH or AMP + α-2 or α-2 alone, or ATX alone	MPH or AMP (not used in Stage 3 +/- α-2 (monitor HTN)	MPH or AMP (not used in Stage 3, monitor comorbidity)
Stage 5	Call SPARK		

*MPH: methylphenidate AMP: amphetamine α-2 agonists: ER/IR guanfacine, ER/IR clonidine ATX: atomoxetine

Stimulant Dosing Parameters			
	Dosage Forms	Maximum Recommended Dose	Notes
Methylphenidates			
Long-acting			
Focalin XR (Novartis, East Hanover, NJ)	5-, 10-, 15-, 20-, 25-, 30-, 35-, and 40-mg capsules	1 mg/kg or 30 mg/day	Capsule may be opened and contents dissolved
Methylphenidate ER (Concerta)	18-, 27-, 36-, and 54-mg tablets	2 mg/kg or 72 mg/day	Tablet must be swallowed whole
Ritalin LA (ALZA, Mountain View, CA)	10-, 20-, 30-, and 40-mg capsules	2 mg/kg or 60 mg/day	Capsule may be opened and contents dissolved
Metadate CD (UCB, Rochester, NY)	10-, 20-, 30-, 40-, 50-, and 60-mg capsules	2 mg/kg or 60 mg/day	Capsule may be opened and contents dissolved
Methylin ER (AlliantPhr, Alpharetta, GA)	10- and 20-mg tablets	2 mg/kg or 60 mg/day	
Ritalin SR (Novartis, East Hanover, NJ)	20-mg tablets	2 mg/kg or 60 mg/day	
Daytrana (Shire US, Wayne, PA)	10-, 15-, 20-, and 30-mg patches	30 mg/day	Topical patch applied two hours before and removed nine hours later
Quillivant (Pfizer, New York, NY)	25-mg/5-mL suspension	Initial dose 20 mg QAM titrated by 10- to 20-mg increments Maximum dose 60 mg QAM	Liquid formulation

Azstarys (serdexmethylpheni-date/dexmethylyphe-nidate)	26.1 / 5.2 po Qday may increase to 39.2 / 7.8 mg po Qday after 1 week and up to 52.3 / 10.4 mg/day	52.3 / 10.4 mg/day	Caps 26.1 / 5.2mg, 39.2 / 7.8mg, 52.3 / 10.4 mg
Relexxi (methylphenidate) ER tablets	Start 18mg po QAM, may increase by 18mg po Qday after 7 days	6-12 max dose 54mg 13+ max dose 72mg (2mg/kg/day)	ER Tabs, 18,27,36,45,63, 72
Short-acting			
Focalin (Novartis, East Hanover, NJ)	2.5-, 5-, and 10-mg tablets	2 mg/kg or 60 mg/day	
Ritalin (Novartis, East Hanover, NJ)	5-, 10-, and 20-mg tablets	2 mg/kg or 60 mg/day	
Methylin (AlliantPhr, Alpharetta, GA)	5-, 10-, and 20-mg tablets or 5-mg/5-mL or 10-mg/5-mL solution	2 mg/kg or 60 mg/day	Liquid formulation available
Amphetamines			
Long-acting			
Vyvanse (Shire US, Wayne, PA)	10-, 20-, 30-, 40-, 50-, 60-, and 70-mg capsules	1 mg/kg or 70 mg/day	Prodrug that may decrease risk of recreational abuse Capsule may be opened and contents dissolved
Adderall XR (Shire US, Wayne, PA)	5-, 10-, 15-, 20-, 25-, and 30-mg capsules	1 mg/kg or 30 mg/day	Capsule may be opened and contents dissolved
Dexedrine (GlaxoSmithKline, Research Triangle Park, SC)	5-, 10-, and 15-mg capsules	1 mg/kg or 30 mg/day	
Dyanavel XR (amphetamine)	5mg, 10mg, 20mg ER Tab 2.5mg /ml Solution	20mg po Qday	
Xelstrym (dextroamphetamine)	4.5mg patch q day for 9 hours, off 15	May increase up to next patch week, Max 18mg/9hours	Apply 2 hours before desired effect

Short-acting			
Adderall (Shire US, Wayne, PA)	5-, 7.5-, 10-, 12.5-, 15-, 20-, and 30-mg tablets		
Dextroamphetamine (GlaxoSmithKline, Research Triangle Park, SC)	5- and 10-mg tabs		
ProCentra (Independence Pharmaceuticals, Newport, KY)	5-mg/5-mL solution		Liquid formulation available
CD, controlled delivery; LA, long-acting; SR, sustained release; XR, extended release			

Southammakosane, Cathy, and Kristine Schmitz. "Pediatric Psychopharmacology for Treatment of ADHD, Depression, and Anxiety." *Pediatrics* 136.2 (2015): 351–359. Web.

Nonstimulant ADHD Medication Dosing Parameters				
Generic (Brand)	**Initial Dose**	**Titration**	**Maximum Recommended Dose**	**Dosage Forms**
Alpha Agonists				
Guanfacine ER (Intuniv)[a] (Shire US, Wayne, PA)	1 mg qHS	1 mg	27–40.5 kg, 2 mg 40.5–45 kg, 3 mg >45 kg, 4 mg qHS	1-, 2-, 3-, and 4-mg tablets
Clonidine ER (Kapvay)[a] (Concordia Pharmaceuticals, Inc. Bridgetown, Barbados)	0.1 mg qHS	0.1 mg	27–40.5 kg, 0.2 mg TDD 40.5–45 kg, 0.3 mg TDD >45 kg, 0.4 mg TDD	.01-mg tablets
Onyda XR (clonidine)	Start 0.1 mg po QHS	May increase to 0.1mg po Qday each week	Max 0.4mg po Qday	Taper dose by no more than 0.1mg po qday every 3–7 days

Additional non-stimulant options				
Atomoxetine (Strattera)[a] (Eli Lilly, Indianapolis, IN)	0.5 mg/kg or 40 mg	1.2 mg/kg or 80 mg	1.4 mg/kg or 100 mg TDD	10-, 18-, 25-, 40-, 60-, 80-, 100-mg tablets
Qelbree (vilaxazine)	100 mg po Qday (can go up to 200 mg age 12 and older)	Increase by 100 mg po Q week	400 mg Qday	ER Caps 100mg, 150mg, 200mg
qHS, take at bedtime; TDD, total daily dose. [a] Tablets must be swallowed whole.				

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OTHER RESOURCES:

- Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD): https://chadd.org/
- American Psychiatric Association: https://www.psychiatry.org/patients-families/adhd/what-is-adhd
- Centers for Disease Control and Prevention – ADHD https://www.cdc.gov/ncbddd/adhd/index.html
- National Institute of Mental Health – What is ADHD https://www.nimh.nih.gov/health/publications/could-i-have-adhd/index.shtml#pub1
- Cohen Children's Medical Center, visual aid http://www.adhdmedicationguide.com/
- *Defiant Children*, by Russel Barkley
- *Helping the Noncompliant Child*, by Rex Forehand and Robert J. McMahon
- *Parents and Adolescents Working Together*, by Gerald R. Patterson and Marion S. Forgatch

Autism Spectrum Disorder (Early childhood–17 years)

- Autism Spectrum Disorder (ASD)
- Older terminology: Autistic Disorder, Asperger's syndrome, Pervasive developmental disorder

CLINICAL PEARLS

- Core symptoms include social communication deficits and restricted, repetitive or sensory behaviors. Children with ASD can present in diverse ways with varying levels of severity in language skills, intellectual abilities and functioning.
- Assessment and treatment should be interdisciplinary. Early diagnosis and intervention can improve outcomes.
- Care coordination and advocacy in educational and community-based settings is important.
- Medical and behavioral health conditions can co-occur in children with autism, requiring individualized assessment and treatment planning. In children with acute behavioral change, it is important to rule out dental pain, sleep problems, medication side effects, pain, gastrointestinal problems or seizure disorders.[12,18]
- Behavioral, other therapeutic and school-based interventions are the mainstay of ASD treatment. Providers should advocate for school-based services, including evaluation of an appropriate Individualized Education Program (IEP).[15,17]
- No medication specifically addresses the core symptoms of ASD. Children with ASD can be treated with psychotropic medications when there is a specific target symptom or co-occurring behavioral health condition.
- Clinicians should ask about the use of complementary and alternative treatments in order to discuss the risks and potential benefits.[15]
- Children with autism may have atypical responses to medication therefore it is imperative to remember:
    - **Start Low and Go Slow:** This approach minimizes the risk of adverse effects while allowing for careful observation of individual responses to medication
    - **Monitoring Matters:** Consistent monitoring for side effects and continued efficacy is paramount in ASD medication management.
    - **One Size Does Not Fit All:** Recognizing the diversity of ASD presentations, Tailoring medication treatments to individual needs is essential in ASD management.
    - **The Importance of Back to Basics:** Paying attention to fundamental health care needs, dental hygiene, constipation, etc. is imperative.[18]

SCREENING AND ASSESSMENT

- Universal screening for autism should occur at the 18 and 24-month well-child visits, or anytime a parent raises concern about autism. If screening indicates concerns for ASD, refer for a comprehensive evaluation for autism.[5]
- Diagnostic assessments for ASD should consider or rule out the following: language disorders, intellectual disability/global developmental delays, hearing impairment, ADHD/disruptive behavior disorders, trauma, reactive attachment disorder, obsessive compulsive disorder and other anxiety disorders, childhood-onset schizophrenia, and other medical conditions.
- Medical assessment of children with ASD should include a comprehensive physical examination, hearing screen and genetics evaluation.
- Additional evaluations are warranted if there are unusual symptoms such as history of developmental regression, facial dysmorphology, staring spells/seizures, or family history of disabilities/genetic syndromes).[15]
- The American Academy of Pediatrics Surveillance and Screening Algorithms for ASD: https://pediatrics.aappublications.org/content/120/5/1183

BEHAVIORAL MANAGEMENT INTERVENTIONS

Behavioral Interventions: Applied Behavioral Analysis (ABA) is recommended to improve communication skills, academic performance, social behavior, adaptive living and vocational skills, and problematic behaviors.[15] Early Intensive Behavioral Intervention (EIBI) in young children has been shown to improve adaptive behavior, IQ, expressive and receptive language skills.[10]

Communication Interventions: Children with limited functional communication often benefit from speech and language therapy supports to identify alternative communication strategies. These can include sign language, visual supports, picture exchange communication system (PECS) or a language device (ex: Proloquo, Dynavox). Children who show pragmatic or social language delays should also be referred to speech and language therapy.[15]

Social Skills & Social Cognitive Training: Group or individual instruction by speech and occupational therapists and other providers can be used to treat children with ASD strategies to interact with others and strengthen understanding of others' perspectives.

Life Skills: Daily life skills can be taught by occupational therapists and other providers.[12]

Other interventions: Sensory-oriented interventions, including auditory integration training, sensory integration therapy. Developmental/social-based therapies that use naturalistic techniques in a community setting such as: Developmental-Individual Difference-Relationship Based (DIR)/Floortime and Relationship Development Intervention (RDI).

IRRITABILITY, AGGRESSION, TANTRUMS AND SELF-INJURIOUS BEHAVIORS (SIB)

Hierarchy	Treatment	Comments
Step 1	Rule out organic causes	Side effects to medications, Sleep disturbances, Gastrointestinal Disease, Unrecognized pain or discomfort (e.g. dental pain)
Step 2	Assess and address the "ABC's" of behavior (Antecedent-Behavior-Consequence) in order to understand the function of the behavior.	Some examples can include: desire to avoid certain tasks, environmental stressors, need for attention, or sensory needs. Inability to communicate needs can also contribute to SIB, so addressing communication skills is important. Applied Behavior Analysis (ABA) therapy can be used to identify the source of irritability or SIB.
Step 3	Make sure the child has a functional means of communication and refer to a speech and language therapist if warranted. An augmentative communication system may be helpful.	Speech pathology can be helpful
Step 4	If irritability is related to an underlying behavioral health issue such as anxiety or depression, treat that accordingly.	See specific diagnosis in the resource guide and treat remember to: • Start Low and Go Slow • Monitoring Matters • One Size Does Not Fit All • The Importance of Back to Basics
If immediate safety concerns exist Step 5A	Risperidone OR Abilify are FDA indicated to treat irritability A trial of 1 medication and if not improved stop that medication and try the other Risperidone can be started at 0.25mg po Q day and increased Q 1-2 weeks by 0.25mg po Qday for max dose of 4mg po Qday Abilify can be started at 1mg po Qday and increased Q 1-2 weeks by 1 mg up to 10-15mg per day	• Start Low and Go Slow • Monitoring Matters • One Size Does Not Fit All • The Importance of Back to Basics With these medications monitoring should address weight and metabolic changes

If immediate safety concerns DO NOT exist Step 5B	Guanfacine can be tried as a first step increased by 0.5mg po Q 1-2 weeks, can be divided in BID dosing if needed up to: 2mg (for 27-40.5kg) 3mg (for 40.5-45kg) 4mg (for > 45kg) IF symptoms do not improve stop Guanfacine and can trial Risperdal OR Abilify	• Start Low and Go Slow • Monitoring Matters • One Size Does Not Fit All • The Importance of Back to Basics

INATTENTION, IMPULSIVITY AND HYPERACTIVITY (ADHD) SYMPTOMS

Hierarchy	Treatment	Comments
Step 1	Rule out organic factors	Medication side effects, Sleep disturbances, unrecognized pain or discomfort
Step 2	Address possible environmental or behavioral causes first. Verify adequate structure is present in the child's environment including visual and positive behavior supports. Consider referral for behavioral therapy or parent child interaction therapy for younger children	
Step 3	Make sure the child has a functional means of communication and refer to a speech and language therapist if warranted. An augmentative communication system may be helpful.	
Step 4	Refer to an occupational therapist to assess/address sensory issues.[12]	
Without co-occurring anxiety, tics or sleep disturbances Step 5A	Consider Stimulants Methylphenidate 1st line Amphetamine Salts 2nd line	Amphetamine salts have not been studied in this population, but can be trialed if MPH is ineffective Review ADHD section for information on prescribing • Start Low and Go Slow • Monitoring Matters • One Size Does Not Fit All • The Importance of Back to Basics

With co-occurring sleep disturbance Step 5B	Clonidine po QHS	• Start Low and Go Slow • Monitoring Matters • One Size Does Not Fit All • The Importance of Back to Basics
With co-occurring anxiety Step 5C	Atomexatine	Please review ADHD section for information on prescribing • Start Low and Go Slow • Monitoring Matters • One Size Does Not Fit All • The Importance of Back to Basics
With co-occurring Tic Disorder Step 5D	Guanfacine (or) Clonidine	• Start Low and Go Slow • Monitoring Matters • One Size Does Not Fit All • The Importance of Back to Basics

ANXIETY AND DEPRESSION

Hierarchy	Treatment	Comments
Step 1	Rule out organic causes	Medication side effects, poor quality of sleep, Gastrointestinal distress, Thyroid Disease *For concerns with OCD symptoms, ensure to differentiate between OCD symptoms which are intrusive and distressing, contrasting with fixated interests in ASD, which may be enjoyed by the individual and/or may serve a self-soothing purpose but can cause distress when disrupted
Step 2	Therapeutic options	CBT can be effective for anxiety and anger management in high-functioning youth with ASD.[1] • psychossocial education • parent training • social recreational programs • mindfulness techniques

Step 3		
For anxiety without co-occuring sleep disturbances, ADHD or irritability	Buspirone	IR 5–30 mg (divided across two administrations)
For anxiety with co-occurring sleep disturbances	Mirtzapine	IR 3.75–45 mg (may be divided across two administrations)
For anxiety with co-occurring depression	Duloxetine	IR 20–90 mg (may be divided across two administrations)
For anxiety with co-occurring ADHD or Irritability	Guanfacine	0.5–4 mg (may be divided across two or more administrations; daily max. dose variesby weight: 2 mg for 27–40.5 kg, 3 mg for 40.5–45kg, 4 mg for > 45 kg)
For acute anxiety	Consider Hydroxyzine	10–200 mg (divided across 2–4 administrations)

SLEEP PROBLEMS

Hierarchy	Treatment	Comments
Step 1	Complete a sleep log	
Step 2	Address any potential organic factors	Side effects from medication, caffeine, disordered breathing (apnea/snoring), Restless Leg Syndrome, iron or magnesium deficiency, nocturnal enuresis, GI distress, seizure activity, pain/discomfort
Step 3	Rule out potential psychiatric comorbidities	Anxiety, ADHD, depression, etc.
Step 4	Implement Behavioral Strategies	Sleep hygiene, engaging in physical activity (not close to bedtime)

Step 5	Melatonin	Children with ASD have lower urinary melatonin secretion than typical children, suggesting possibly lower production levels It is generally recommended to start with 1–3 mg of melatonin about 30 min prior to the desired onset of sleep. Doses can be increased every 5–7 days in 1–3 mg increments up to 10 mg at bedtime. If no effect is seen after giving 10 mg, melatonin should be discontinued, and a new medication should be considered.
Step 6		
Predominant concern sleep onset	Clonidine	For sleep onset, it is generally recommended to start with half of the short-acting clonidine 0.1 mg tablet (0.05 mg) 30 min before bedtime and increase the dose by half a pill every 3 to 5 days as tolerated. For max dose please see ADHD prescribing. Typically, if the patient does not fall asleep within 30 min after lights out after increasing their dose then clonidine should be discontinued.

Predominant concern sleep maintenance	Melatonin ER Clonidine ER OR Guanfacince ER IF above do not work, consider Trazodone or Mirtazapine	Dosing of clonidine ER for sleep disturbances should start with 0.1 mg (these tablets cannot be broken or chewed) and can be increased every 5–7 days until achieving the desired clinical response or reaching a maximum daily dose of 0.3 mg. Long-acting guanfacine preparations can be effective for sleep maintenance. If the short-acting preparation is effective with sleep onset and the patient can swallow a pill, then guanfacine ER can be tried. Dosing of guanfacine ER should start with 1 mg (these tablets cannot be broken or chewed) and can be increased every 5–7 days until achieving the desired clinical response or reaching a maximum dose of 4 mg/day. For Trazodone Start with half of a 50 mg tablet (25 mg) at bedtime and increase weekly by 25 mg to a maximum dosage of 100– 150 mg at bedtime, depending on body weight.

ADDITIONAL SYMPTOM CONSIDERATIONS

- **Repetitive, stereotypic behaviors**
  - Controlled studies of SSRIs (fluoxetine, fluvoxamine, and citalopram) have shown little to no improvement for repetitive behaviors in ASD. There is limited evidence of using aripiprazole and risperidone.[16]
- **Psychosis**
  - Occurs rarely in children with ASD. Antipsychotics are typically used, but only studied in children with psychosis without autism. Refer to a specialist if there is a concern a child with autism may have psychotic symptoms.

For a comprehensive guide of controlled medication studies in ASD, please reference: https://www.aacap.org/App_Themes/AACAP/Docs/resource_centers/autism/Autism_Spectrum_Disorder_Parents_Medication_Guide.pdf

NOTE: Children with autism are hospitalized in psychiatric treatment facilities at much higher rates than children without autism. When inpatient psychiatric treatment is necessary, OHCA provides a guide for inpatient behavioral health treatment options. OHCA Provider Website

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OTHER RESOURCES:

- Autism Focused Intervention Resources & Modules: Free, online video training for use of evidence-based practices with individuals with autism birth to age 22. Includes parent guides. https://afirm.fpg.unc.edu/afirm-modules
- Autism Speaks: National advocacy organization for individuals with ASD providing helpful online resources and toolkits. www.autismspeaks.org
- Autism Treatment Network Toolkits https://www.autismspeaks.org/toolkit?resource_type[606]=606&article_type[2196]=2196&resource_type[606]=606&state[321]=321
- OHCA Behavioral Health Provider Directory: ABA therapists, speech/occupational therapy http://apps.okhca.org/providersearch/
- Oklahoma Autism Center: Provides screenings, preschool/early intervention programs, teacher/other professional development and on-site consultations, and applied research. https://www.autismcenterok.org/
- Oklahoma Autism Network: Oklahoma's autism information and referral site run by the OUHSC College of Allied Health. https://okautism.org/
- Oklahoma Department of Human Services Developmental Disabilities Services (DDS): http://www.okdhs.org/services/dd/Pages/default.aspx
- Oklahoma Department of Rehabilitation Services: http://okrehab.org/
- Oklahoma Family Network: Informs and connects individuals with special health care needs and disabilities, their families and professionals to services and supports in their communities. http://oklahomafamilynetwork.org/
- Oklahoma Parents Center: Parent Training and Information Center funded through the U.S. Department of Education, Office of Special Education Programs and Oklahoma State Department of Education. http://oklahomaparentscenter.org/
- Oklahoma University Child Study Center: Provides interdisciplinary autism evaluations and ongoing medical treatment as well as ASD and other CME trainings for medical providers. https://www.oumedicine.com/department-of-pediatrics/department-sections/devbehav/child-study-center/
- Sooner SUCCESS: Provides resource specialists in 18 Oklahoma counties to promote a comprehensive, coordinated system of health, social and educational services for Oklahoma children and youth with special needs in their community. https://soonersuccess.ouhsc.edu/
- TARC: Advocacy organization that works to ensure a high quality of life for individuals with developmental disabilities and their families through education, empowerment, support, and advocacy. http://www.ddadvocacy.net/

Bipolar Disorder

CLINICAL PEARLS

- Bipolar disorder affects an estimated 2% of pediatric patients under age 21.[1]
- Pediatric bipolar disorder differs from the adult diagnosis with youth typically presenting with rapid fluctuations in mood and behavior. Irritability is thought to be present in up to 90% of pediatric patients with Bipolar disorder. Depression is often the first episode to present.
  *A diagnosis of bipolar disorder should not be given without a full psychological or psychiatric evaluation of the pediatric patient.
- There are no medications approved for children younger than age seven. FDA-approved medications will be preferred first line, but off-label medications can be used if comorbid diagnoses or favorable patient characteristics are present.
- Ensure appropriate monitoring occurs if the child is prescribed medications with risk of metabolic changes, such as atypical antipsychotics, valproate and lithium. Also, the child who is prescribed an atypical antipsychotic should also be monitored for abnormal involuntary movements with the Abnormal Involuntary Movement Scale (AIMS).
- Ensure family supports are present, including family psychoeducation and skill building.

RATING SCALES

- Child Mania Rating Scale-Parent Version[2,3]—age five–17
- Young Mania Rating Scale[4,5]—age 10–17

TREATMENT APPROACH

Stage 1: Diagnostic Assessment.* Access to the AACAP Bipolar guidelines can be found here.[6]

Stage 2: Determine level of care indicated by presenting symptoms (e.g. suicadality, psychosis etc.) Hospitalization may be necessary, consider call to 988 to help determine appropriate safety plan.

Stage 3: Determine stage of illness (e.g. Depressive Episode, Manic Episode, or Maintenance)

ACUTE MANIA

Treatment	Dosages	Notes
Step 1: FDA approved SGA	Aripiprazole (Start 2mg to 5mg po Qday, increase by 5mg after 2 days, recommended dose 10mg, maximum dose 30mg po Qday)	Aripiprazole is considered first line do to its efficacy and side effect profile
	Asenapine (start 2.5mg po BID, increase by 2.5mg po Q 4-5 days for max dose of 10mg po BID)	Asenapine needs to be dissolved on the tongue, if not dissolved less than 2% bioavailable
	Quetiapine (Start 25mg po BID, 1 week Increase 50mg po BID, 1 week 100mg po BID)	
	Risperidone (Start 0.5mg po Qday, Increase by 0.5mg po Qday, Q week to target dose of 2.5mg) Max Dose is 6mg po Qday	Risperidone is most likely to cause increased prolactin and at dosages higher than 4mg acts more as a FGA
	Olanzpine (Start at 2.5mg po Q day and increase by 2.5mg po Q 1 week up to 10mg po Qday)	Olanzapine of all the SGA's is the most likely to cause weight gain
Step 2: Alternative FDA approved SGA	As Above	As Above
Step 2a If partial response augment with Lithium	Litihium (Patients < 12 years old 10-30mg/kg in 2-3 divided dosages) For youth over >30kg 300mg TID can be the starting dose	Lab Work Pretreatment includes (Pregnancy test, CMP, BMP, Calcium) Serum lithium trough should be drawn immediately prior to the next dose Serum levels should be checked every 3-months Dosing ranges 0.8-1.2 mEq/L
Step 2b If no response switch to combination Lithium monotherapy	Litihium (Patients < 12 years old 10-30mg/kg in 2-3 divided dosages) For youth over >30kg 300mg TID can be the starting dose	

Step 3: If partial response to Lithium Monotherapy (or) LIthium SGA combination can consider adding lamotrigine	Lamotrogine for patients over 12 and not taking antiepileptic medications 25mg po Qday for 2 weeks, increased to 50mg po Qday for 2 weeks and again increasing by 50mg over the next two weeks	Rapid escalation in dose raises risk of Stevens Johnson Syndrome. Patients should be advised if they miss over 3 days of dosages to not restart medication.
Call SPARK		

ACUTE DEPRESSION

Treatment	Dosages	Notes
Step 1	Can consider light therapy and Omega 3 Fatty Acid Supplementation	Bipolar illness is considered a severe and persistent illness and medications are likely indicated for ongoing treatment
Step 2	Lurasidone (Starting dose 20mg po Qday for at least 1 week, increase by 20mg po Qday each week until symptom remission or recommended dose of 80mg/day)	Lurasidone needs to be taken with at least 350 calorie meal
Step 2a If partial response to Lurasidone	Augment with Lamotrogine. Lamotrogine for patients over 12 and not taking antiepileptic medications 25mg po Qday for 2 weeks, increased to 50mg po Qday for 2 weeks and again increasing by 50mg over the next two weeks	Rapid escalation in dose raises risk of Stevens Johnson Syndrome. Patients should be advised if they miss over 3 days of dosages to not restart medication.
Step 3 If No response to Lurasidone	Olanzapine/Fuloxetine starting dose 3mg/25mg titrate up every week (6/25. 6/50, 12/25, 12/50)	Of the SGA's olanzapine causes the most weight gain

Step 3a If partial response to Olanzapine/Fluoxetine combination	Augment with Lamotrogine. Lamotrogine for patients over 12 and not taking antiepileptic medications 25mg po Qday for 2 weeks, increased to 50mg po Qday for 2 weeks and again increasing by 50mg over the next two weeks	Rapid escalation in dose raises risk of Stevens Johnson Syndrome. Patients should be advised if they miss over 3 days of dosages to not restart medication.
If partial response to above Call the SPARK consultation line for additional guidance		

*FDA indicated medications

MAINTENANCE

Step 1	If the patient is stable and there are no ill effects of medications we advice continuing current medication.	There is limited guidance to determine tapering off medications for youth with Bipolar illness; which is thought to be a chronic disease
Step 2	If patient is stable and side effects exists it might be helpful to slowly reduce the offending medication slowly and monitor for symptom return	It is not uncommon that higher dosages of medications are needed during the acute phase of the illness. Youth might become more susceptible to side effects (e.g. somnolence) once their mood symptoms have resolved
Step 3	Litihium (Patients < 12 years old 10-30mg/kg in 2-3 divided dosages) For youth over >30kg 300mg TID can be the starting dose	Lithium is currently the only evidence based intervention for maintenance of Bipolar disorder in youth

MEDICATION CLINICAL PEARLS:

- Any person started on an atypical antipsychotic should follow the American Diabetes Association's monitoring recommendations for metabolic syndrome. The following monitoring parameters should be met to ensure patient safety from known adverse effects:[22]

Monitoring Frequency							
Parameter	Baseline	Week 4	Week 8	Week 12	Quarterly	Annually	Every 5 years
Medical history*	X					X	
Weight (BMI)	X	X	X	X	X		
Waist circumference	X					X	
Blood pressure	X			X		X	
Fasting glucose or hemoglobin A1c	X			X		X	
Fasting lipids (HDL, LDL, triglycerides, total cholesterol)	X			X			X
AIMS Every 6-12 months							
Pregnancy As indicated							
EKG indicated IF cardiac history, concerns for QTc prolongation	X			X			

- Prolactin level should be assessed if symptomatic
- If tolerability is an issue you may consider splitting the dosages.
- Do not use two atypical antipsychotics at the same time.[23]
- Consider adverse effect profile when selecting an agent to treat bipolar disorder in youths.[24] Atypical antipsychotics olanzapine, quetiapine and risperidone have higher rates of weight gain than ziprasidone and aripiprazole.[22,25-27]

USE OF MEDICATIONS TO TREAT WEIGHT GAIN ASSOCIATED WITH SGAS

Topiramate has been shown to be safe and effective in reducing SGA associated weight gain.[33]

	Initial	Titration	Max	Notes
Topirimate	12.5 to 25mg	Increase by 12.5 to 25 mg weekly for weeks	200mg po	

For pediatric patients on SGA's with BMI >85% and are without contraindications (e.g. medical illness, underlying eating disorders, allergies, etc.) may benefit from the use of Metformin to manage additional weight gain and complications of potential metabolic syndrome. (34) Below is the recommended titration schedule from the MOBILITY Study.

	Initial	Titration	Max	Notes
Metformin For youth <50kg	500mg po QPM	Week 3 Increase to 500 mg po QAM/QPM Week 5 increase to 500 mg po QAM and 1000 mg po QHS	500 mg po QAm and 1000 mg po QHS	Tolerability likely effects dosage
Metformin For youth >50kg	500mg po QPM	As above, but continue to increase to 1000 mg po QAM/ QHS at week 7	1000 mg po QAM and QHS	Tolerability likely effects dosage

Lexi-complete Online.

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OTHER RESOURCES

- Depression and Bipolar Support Alliance
- National Alliance on Mental Illness (NAMI)
- Tardive Dyskinesia Facts and Figures
- Zyprexa Relprevv REMS Program

Childhood- or Adolescent-Onset Schizophrenia and other early-onset Psychotic Disorders (Ages 6–18)*

- Schizophrenia
- Schizoaffective Disorder
- Schizophreniform Disorder
- Brief Psychotic Disorder
- Delusional Disorder
- Substance/Medication-Induced Psychotic Disorder
- Psychotic Disorder due to another Medical Condition
- Schizotypal, paranoid, and schizoid personality disorders (Personality Disorders are not typically diagnosed in an individual younger than 18 years of age).

*Early Onset Schizophrenia (EOS) is before age 18. Childhood Onset Schizophrenia (COS) is before age 13 years. DSM-5 lists Schizophrenia Spectrum and Other Psychotic Disorders.

CLINICAL PEARLS:

Prior to diagnosing and/or continuing care with a youth diagnosed with schizophrenia we highly encourage consultation with our SPARK team. OKSPARK.ORG

- Childhood-Onset Schizophrenia (COS) is very rare but shows a pattern similar to poor outcome adult cases. The diagnostic criteria are the same for adults, adolescents, and children. COS can usually be distinguished by its severe and pervasive nature and its non-episodic and unremitting course.
- Because COS is rare, it must be distinguished from several childhood conditions that can manifest with psychotic symptoms and/or deterioration in function: affective disorders, psychosis due to a general medical condition (such as migraines, inborn errors of metabolism, delirium, substance abuse disorders), autism spectrum disorders, childhood disintegrative disorders, obsessive compulsive disorder, conduct disorder and trauma-related disorders.
- Brain imaging (CT/MRI) and a sleep-deprived EEG should be considered. Labs including complete blood count (CBC), comprehensive metabolic panel (CMP), and thyroid-stimulating hormone (TSH) are standard. Amino acid screens for inborn errors of metabolism, ceruloplasmin for Wilson's disease, porphobilinogen for acute intermittent porphyria, if clinical presentation is suggestive of the specific syndrome in question.
- Note that 28% to 65% of children ages five to 12 report experiencing imaginary friends that could be misinterpreted as pathologic. Youth may also experience voices with trauma, PTSD, and substance use.
- Youth with schizophrenia generally experience more hallucinations and fewer delusions than adult patients. It is important to note that auditory hallucinations alone do not substantiate the diagnosis of schizophrenia.
- **Clinical High-Risk for Psychosis (CHR-P)** refers to adolescents and young adults with mild or brief psychotic symptoms (hallucinations, delusions, disorganized thinking) or declining function, indicating increased risk of developing a psychotic disorder. While CHR-P individuals have a higher risk of psychosis, **only ~30% progress** to full psychosis within two years. Predicting who will transition is difficult. Be alert for young patients with prodromal symptoms: **mild or intermittent psychotic symptoms** (e.g., vague paranoia, unusual beliefs), **brief psychotic episodes** (lasting less than a day), **unexplained functional decline** (academic, social, occupational), **family history of schizophrenia or psychotic disorders**.
- Since legalizing marijuana for medicinal use in 2018, Oklahoma youth use rates have increased 73%. THC content is higher and youth are using it at an earlier age. Screening for cannabis use as both an acute reaction and risk for development of psychosis is imperative.

- **Methylphenidate induced psychosis** is a rare but possible side effect of methylphenidate treatment, particularly in children with pre-existing vulnerabilities. Close monitoring is recommended. Long-term use does not significantly increase the risk of psychosis, though isolated cases have been reported. Symptoms typically resolve after discontinuation of methylphenidate and do not usually require treatment with antipsychotics.

SCREENING TOOLS

- **Prodromal Questionnaire-Brief Child Version (PQ-BC)**: Modified version of the original PQ-B, specifically designed for use with school-aged children to measure psychotic-like experiences.
- **Youth Psychosis At-Risk Questionnaire-Brief (YPARQ-B)**: Used to assess psychotic-like experiences in youth, focusing on positive symptoms such as unusual beliefs or perceptual experiences.

TREATMENT

Diagnostic Assessment: The diagnosis of adolescent-onset or childhood-onset schizophrenia has a very serious prognosis that brings profound changes to a child and family. The diagnosis should be made with detailed input of family, teachers, pediatricians, family physicians, etc. A psychological battery of testing is strongly suggested. The previously mentioned imaging and lab studies should be considered. Finally, the diagnosis and initial management needs to be made by an adult or child psychiatrist experienced in the evaluation and treatment of adolescents and children. Consultation with our SPARK team is recommended.

	Treatment	Notes
Step 1	Youth with schizophrenia and their families need intensive support and case management services, including psychoeducational therapies addressing treatment options, safety planning and relapse prevention	Programs like NAVIGATE or First episode psychosis programs have been shown to be beneficial for care. National Alliance on Mental Illness (NAMI).
Step 2	Monotherapy with an antipsychotic is recommended.	Atypical (second-generation) antipsychotics are usually recommended over first-generation. • First-line medication choice is based on the side-effect profile, patient/family preference, and cost. • A therapeutic trial is usually four to six weeks.

Step 2a	However, if there is no response after two weeks at a therapeutic dose, consider changing to a different agent.	
Step 3	After two trials of a second-generation antipsychotic then a first-generation antipsychotic could be considered.	The medications should be cross-titrated for safety. • We advise consultation if the clinician is not experienced in cross titration of anti-psychotics. • Clinicians should be mindful of cross-titration relative to the different side effect profiles or high- potency to low-potency antipsychotics and vice versa. • Clinicians should monitor for worsening or recurrence of psychosis or breakthrough insomnia.
Step 4	Patients with treatment failure exacerbated by chronic noncompliance may be aided by long-acting depot antipsychotic agents. Consultation with SPARK should be initiated prior to starting an LAI	Available agents include risperidone microspheres, paliperidone palmitate, aripiprazole extended-release injectable suspension, olanzapine pamoate, Haloperidol decanoate, fluphenazine decanoate. • If a youth is to be started on a long-term injectable they should be registered. NONE of these agents are FDA-approved for use in youth. Note: Olanzapine pamoate has been linked with a potentially life-threatening post injection syndrome.

Withdrawal Dyskinesia refers to involuntary movements that can occur after the abrupt discontinuation of antipsychotic medications. It usually self-resolves within a short period. To reduce the risk, gradual tapering of antipsychotics is recommended.

SWITCHING ANTIPSYCHOTIC DRUGS

Approaches to switching medication vary in the rate of change and extent of any overlap of agents. Pharmacokinetically and pharmacologically the lowest risk strategy for switching is to have a drug free interval. In practice the aim is to avoid additive effects of the agents that may result in unpredictable toxicity while at the same time ensuring adequate antipsychotic cover. The advantages and disadvantages of the various approaches to switching antipsychotics are summarized:

Drug free interval	
Advantages • Minimal potential for combined adverse drug reactions • Minimal potential for drug interactions • Clarity between side effects of second drug and discontinuation effects from first drug • Anticholinergic/antiakathisia medication can be titrated independently • Reduces potential for additive myelosupression when switching to clozapine • Low risk of medication errors	**Disadvantages** • Length of time taken • High level of monitoring required, possibly even in-patient care • Risks of relapse • Relapse can be misinterpreted as lack of efficacy of second drug
Gradual reduction of drug A followed by starting B	
Advantages • Low risk of medication errors • Straightforward	**Disadvantages** • Risk of relapse • Potential for combined adverse drug reactions • Potential for drug interactions
Sudden withdrawal of drug A followed by starting B	
Advantages • Appropriate where an acute, severe reaction necessitates abrupt withdrawal, e.g. clozapine • Low risk of medication errors • Straightforward	**Disadvantages** • Risk of relapse especially if discontinuing clozapine • Potential for combined adverse drug reactions • Potential for drug interactions

Partial Overlap	
Advantages	**Disadvantages**
• Good if there is high risk of relapse • Changes are less abrupt • Useful for switch from depot to oral as depot plasma levels decline slowly and withdrawal reactions have not been reported • Useful for high potency to atypical • Useful where there is potential for cholinergic rebound	• Tapering too quickly can cause inadequate cover • Potential for combined Adverse Drug Reactions (ADRs) • Potential for drug interactions • Potential for medication errors and compliance problems • Incomplete switches can result in polypharmacy
Full Overlap	
Advantages	**Disadvantages**
• Useful where relapse prevention is the greatest concern • Low risk of discontinuation effects from first drug • Low risk strategy when changing from depot to oral as allows opportunity to assess compliance with oral therapy	• Possibility of combined ADRs • Potential for drug interactions • Potential for medication errors and compliance problems • Incomplete switches can result in polypharmacy

For all antipsychotic trials, systematic side-effect monitoring is needed, including extrapyramidal side effects and metabolic monitoring per American Diabetic Association (ADA) guidelines. Adjunctive agents may be indicated to treat/prevent enhanced exopolysaccaride (EPS) production or metabolic side effects.

American Diabetes Association/American Psychiatric Association Guidelines for Metabolic Monitoring in Recipients of Antipsychotic Medications							
	Monitoring Frequency						
Parameter	Baseline	Week 4	Week 8	Week 12	Quarterly	Annually	Every 5 years
Medical history*	X					X	
Weight (BMI)	X	X	X	X	X		
Waist circumference	X					X	
Blood pressure	X			X		X	
Fasting glucose or hemoglobin A1c	X			X		X	
Fasting lipids (HDL, LDL, triglycerides, total cholesterol)	X			X			X
AIMS at least every 6 months							

*Notes: Medical history includes personal and family history of diabetes, hypertension and cardiovascular disease. More frequent assessments may be warranted based on clinical status.

Zyprexa REMS
https://www.zyprexarelprevvprogram.com/public/Default.aspx

Other Risk Evaluation and Mitigation Strategies (REMS) programs
https://www.accessdata.fda.gov/scripts/cder/rems/index.cfm

Antipsychotics: Second Generation (Atypical)						
Drug (generic)	**Drug (brand)+**	**Initial Dosage**	**Literature Based Maximum Dosage**	**FDA Approved Maximum Dosage for Children and Adolescents**	**Schedule**	**Black Box Warning**
Aripiprazole*	Abilify® Abilify Discmelt® (oral disintegrating tab) Abilify® (oral solution)	Age ≥ 4 years: 2 mg/ day	Age 4–11 years: 15 mg/day Age ≥12 years: 30 mg/day	Approved for treatment of Bipolar Mania or Mixed Episodes (age 10–17 years) and Schizophrenia (13–17 years): 30 mg/day Approved for treatment of irritability associated with Autistic Disorder (age 6–17 years): 15 mg/day	Once daily	Increased the risk of suicidal thoughts and behavior in short-term studies in children, adolescents, and young adults with major depressive disorder and other psychiatric disorders
Quetiapine*	Seroquel®	Age 5–9 years: 12.5-25 mg/day Age 10–17 years: 50 mg/day	Age 5–9 years: 400mg/day Age 10–17 years: 800 mg/day	Approved for treatment of Bipolar Mania (age 10-17 years): 600 mg/day Approved for treatment of Schizophrenia (13-17 years): 800 mg/day	IR: One to three times daily XR: Once daily	
Olanzapine*	Zyprexa® Zyprexa Zydis®	Age 4–5 years: 1.25 mg/day Age 6–12years: 2.5 mg/day Age ≥ 13years: 2.5–5 mg/day	Age 4-5 years: 12.5 mg/day Age 6-17 years: 20 mg/ day	Approved for treatment of Bipolar Mania or Mixed Episodes and Schizophrenia (age 13-17 years): 20 mg/day	Once daily	None related to youth
Risperidone*	Risperdal® Risperdal M-Tab® (oral disintegrating tab) Risperdal® (oral solution)	Age 4–5 years: <20 kg: 0.25 mg/day >20 kg: 0.5 mg/day Age ≥6 years: 0.5 mg/day	Age 4–11 years: 3 mg/day Age ≥12 years: 6 mg/day	Approved for treatment of Schizophrenia (age 13-17 years) and Bipolar Mania or Mixed Episodes (age 10–17 years): 6mg/day Approved for treatment of irritability associated with autistic disorder (age 5–16 years): 3 mg/day	Once or twice daily	None related to youth

Clozapine*	Clozaril® FazaClo® (oral disintegrating tablet) Versacloz® oral suspension	Age 8-11 years: 6.25–12.5 mg/day Age ≥12 years: 6.25–25 mg/day	Age 8–11 years: 150-300 mg/day Age ≥12 years: 600 mg/day Target serum clozapine level of 350 ng/mL for optimal efficacy	Not approved for children and adolescents	Once or twice daily	Risk of life-threatening agranulocytosis Seizures Myocarditis Other adverse cardiovascular and respiratory effects
Asenapine	Saphris® (sublingual tablet)	Age ≥ 10 years: 2.5 mg twice daily	Age ≥ 10 years: 10 mg twice daily	Approved for acute treatment of Bipolar Mania and Mixed Episodes (age 10–17 years): 10 mg twice daily	Twice daily. Avoid eating or drinking for 10 minutes after sublingual inistration	None related to youth
Iloperidone**	Fanapt®	Insufficient Evidence	Insufficient Evidence	Not approved for children and adolescents	Insufficient Evidence	None related to youth
Paliperidone*	Invega®	Children: Insufficient Evidence Adolescents: (Age ≥12 years): 3 mg/day	Children: Insufficient Evidence Adolescents (Age ≥12 years), Schizophrenia: Weight <51 kg: 6 mg/day Weight ≥51 kg: 12 mg/day	Approved for treatment of Schizophrenia (age 12–17 years): Weight <51 kg: 6 mg/day Weight ≥51 kg: 12 mg/day	Once daily	None related to youth
Ziprasidone*	Geodon®	Bipolar Disorder (age 10-17 years): 20 mg/day Tourette's Disorder: 5 mg/day	Bipolar Disorder (age 10–17 years) Weight ≤45 kg: 80 mg/day Weight > 45 kg: 160 mg/day Tourette's Disorder: 40 mg/day	Not approved for children and Adolescents Ziprasidone was not found to be superior to placebo for treating adolescent schizophrenia, (Findling et al., 2013), and therefore is not recommended for treating schizophrenia in this age group.	Twice daily; take with ≥500 calorie meal	None related to youth
Lurasidone***	Latuda®	40 mg per day	40 mg to 80 mg per day	Schizophrenia – adolescents (13–17 years) (2.1)	Once daily taken with >350 calorie meal	None related to youth

Brexpiprazole	Rexulti®	Insufficient Evidence	Insufficient Evidence	Not approved for children and adolescents	Insufficient Evidence	Antidepressants increased the risk of suicidal thoughts and behavior in children, adolescents, and young adults in short-term studies.
Cariprazine	Wraylar©	Insufficient Evidence	Insufficient Evidence	Not approved for children and adolescents	Insufficient Evidence	

Antipsychotics: First Generation (Typical)

Drug (generic)	Drug (brand)	Initial Dosage	Literature Based Maximum Dosage	FDA Approved Maximum Dosage for Children and Adolescents	Schedule	Black Box Warning
Chlorpromazine*	Thorazine®	Age >6 months: 0.25 mg/lb every 4–6 hours, as needed Adolescents: 10-25 mg/dose every 4–6 hours	Age <5 years: 40 mg/day Age 5–12 years: 75 mg/day Age >12 years: 800 mg/day	Approved for treatment of severe behavioral problems (age 6 months-12 years) Outpatient Children: 0.55 mg/kg every 4–6 hours, as needed Inpatient Children: 500 mg/day Approved for the management of manifestations of Psychotic Disorders (age >12 years): 1000 mg/day	One to six times daily	None related to youth
Haloperidol*	Haldol®	Age 3–12 years weighing 15-40 kg: 0.025-0.05 mg/kg/day ≥40 kg: 1 mg/day Age >12: 1 mg/day	Age 3–12 years: 0.15 mg/kg/day or 6 mg/day, whichever is less Age >12 years: Acute agitation: 10 mg/dose Psychosis: 15 mg/day Tourette's Disorder: 15 mg/ day	Approved for treatment of Psychotic Disorders, Tourette's Disorder, and severe behavioral problems (age ≥3 years): Psychosis: 0.15 mg/kg/day Tourette's Disorder and severe behavioral problems: 0.075 mg/kg/day Severely disturbed children: 6 mg/day	One to three times daily	None related to youth

Perphenazine*	Trilafon®	Age 6–12 years: Insufficient Evidence Age >12 years: 4–16 mg two to four times daily	Age 6–12 years: Insufficient Evidence Age >12 years: 64 mg/day	Approved for treatment of psychotic disorders (age ≥12 years): Outpatient: 24 mg/day Inpatient: 64 mg/day	Two to four times daily	None related to youth
Pimozide	Orap®	Age ≥7 years: 0.05 mg/kg	Age 7–12 years: 6 mg/day or 0.2 mg/kg/day, whichever is less Age ≥12 years: 10 mg/day or 0.2 mg/kg/day, whichever is less	Approved for treatment of Tourette's Disorder (age ≥12 years): 10 mg/day or 0.2 mg/kg/day, whichever is less	Once or twice daily	None

*Generic available

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Depression (6–17 years of age)

CLINICAL PEARLS:

- Approximately 2% of children and at least 4% of adolescents suffer from depression at any given time; by the end of high school, one in five will have had at least one episode of depression.
- First-line treatment for mild depression is psychotherapy and an addition of a Selective Serotonin Reuptake Inhibitors (SSRIs), for moderate-to-severe depression not responsive to therapy.
- If abuse is suspected, ensuring the safety of the patient is the first priority of treatment.
    - Oklahoma Department of Human Services Child Abuse and Neglect Hotline: 800-522-3511
- Depression is closely associated with suicidal thoughts and behavior; thus, it is imperative to evaluate these symptoms at the initial and subsequent assessments.
    - 988 for mental health emergencies
    - Removing access to firearms and other lethal means is an important part of suicide prevention (refer to Section 15: Adolescent Suicide for more details)
- Comorbid diagnoses (anxiety, disruptive disorders, ADHD, substance use disorder) are common; depression increases the risk of the development of non-mood psychiatric problems (e.g., conduct disorder, substance abuse disorders).
- Quality sleep and exercise have been shown to be helpful in addressing adolescent depression and should be discussed with adolescents and families to help support depressive symptoms. (6,7)

RATING SCALES:

- Center for Epidemiological Studies Depression Scale for Children (CES-DC): ages six–17
  https://www.brightfutures.org/mentalhealth/pdf/professionals/bridges/ces_dc.pdf
- Patient Health Questionnaire (PHQ-9) Modified for Adolescents (PHQ-A): ages 11-17
  https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwjxs_zor7zjAhVFWs0KHc9hAsAQFjAAegQIAhAC&url=https%3A%2F%2Fwww.psychiatry.org%2FFile%2520Library%2FPsychiatrists%2FPractice%2FDSM%2FAPA_DSM5_Severity-Measure-For-Depression-Child-Age-11-to-17.pdf&usg=AOvVaw35XhmW8SFxp4QR6NyDN9MA

TREATMENT APPROACH:

Stage 1: Diagnostic assessment (DSM-5 criteria with concurrent therapy in place, mild-to- moderate depression can be diagnosed and treated in the medical home.

1A: Several psychiatric and medical disorders may co-occur with or mimic major depressive disorder (e.g. hypothyroidism, mononucleosis, side effects to medications).

Stage 2: For patients with mild or brief depression: supportive therapy (education, support, and case management related to stressors in the family and school).

2A: Monitor for response to supportive therapy (four to six weeks) with rating scale.

- If improving, continue treatment.

Stage 3: For patients who do not respond to supportive psychotherapy or who have moderate to severe depression (including chronic or recurrent depression, psychosocial impairment, suicidality, agitation, and psychosis) there are recommended specific types of psychotherapy and/or antidepressants:

- Cognitive-behavioral therapy (CBT) or interpersonal therapy (IBT); and
- Selective Serotonin Reuptake Inhibitors (SSRIs): fluoxetine is FDA-approved in ages eight and older; escitalopram is FDA approved in ages 12 and older.

Black Box Warning: Antidepressants can increase the risk of suicidal thinking and behavior in children, adolescents, and young adults with MDD. Patients of all ages should be closely monitored for clinical worsening and emergence of suicidal thoughts and behaviors.

- Despite the above black box warning, SSRIs are first-line pharmacotherapy for pediatric/adolescent depression. It is important to note that depression is closely associated with suicidal thoughts and behavior, and untreated depression increases the risk of suicide.

Call or text 988 the National Mental Health Emergency Line
https://suicidepreventionlifeline.org/help-yourself/youth/

ACTIVATION

- A cluster of symptoms that represent a hyperarousal event characterized by impulsivity, restlessness, and/or insomnia can occur with the initiation or increase in SSRIs.
- Evidence is unclear if activation is a predictor of underlying Bipolar disorder; but in instances of increased severity of depressive symptoms and strong family history of Bipolar disorder it should be considered
- Activation is more often to occur in younger children AND at higher doses of SSRIs but not always
- Treating activation in pediatric patients can include:
    - Decreasing the dose of the SSRI
    - Stopping the SSRI
    - Treating the underlying symptoms of activation (e.g. melatonin for sleep disturbances)

3A: Monitor for treatment response (four to six weeks) with rating scale; also monitor for suicidal thoughts and behaviors.

- If improving, continue treatment.
- If tolerating treatment but incomplete response, consider increasing SSRI dose (or consider adding SSRI or psychotherapy, if not already on combination of SSRI + psychotherapy).
- If not tolerating treatment/side effects, stop treatment/SSRI and consider alternative treatments (alternative SSRI and/or psychotherapy).
- If no or minimal response after at least eight weeks of treatment (including dose optimization) with two different SSRIs, consider consultation with mental health specialist (and referral, if appropriate). Call the SPARK consultation line.

Stage 4: For depressed patients with psychosis or bipolar disorder, specific treatments may be required (atypical antipsychotics plus antidepressants, light therapy, mood-stabilizing agents). Consultation (and/or referral) with mental health specialist is indicated.

Stage 5: Once the patient has been asymptomatic for six to 12 months, the prescriber should determine if maintenance therapy (and the type and duration of therapy) is indicated, taking into account the severity of the episode of depression and/or number of recurrences, with the goal of fostering healthy growth and development and preventing recurrences.

FDA-Approved Antidepressants for Pediatric Use			
	MDD	**Other Pediatric Indications**	**Starting Dose and Typical Dosage Rangers**
Selective Serotonin Reuptake Inhibitors (SSRIs)			
Escitalopram tabs & oral soln (Lexapro®)	ages 12–17	n/a	5mg (10mg–20mg)
Fluoxetine IR tabs, caps, & oral soln (Prozac®, Sarafem®)	ages 8–17	OCD: ages 7–17 Depressive episodes asso. w/bipolar I d/o (in combo w/ olanzapine): ages 10–17¥	10mg (20mg–40mg) *Higher dosage may be indicated for anxiety titrate to treatment effect
Fluvoxamine IR tabs (Luvox®)	n/a	OCD: ages 8–17	25mg (50–200mg)
Sertraline tabs & oral soln (Zoloft®)	n/a	OCD: ages 6–17	25mg (100mg–200mg)
Selective Serotonin and Norepinephrine Reuptake Inhibitors (SNRIs)			
Duloxetine caps (Cymbalta®)	n/a	Generalized anxiety d/o: ages 7–17 (limited evidence to support use in pediatric depression)	30mg (40–60mg)
Atypical Antidepressants			
Bupropion		Adolescents (also considered 4th line in ADHD)	100mg (150mg-300mg)
Mirtazepine		Adolescents (pediatric data is limited)	7.5mg (15mg–45mg)

¥ Zyprexa® (olanzapine) is indicated for depressive episodes asso. w/bipolar I d/o in ages 10-17 (in combination with fluoxetine); Symbyax® (fluoxetine/olanzapine) is also FDA-approved for depressive episodes asso. w/bipolar I d/o in ages 10-17.

α TCAs are not recommended as first-line treatment of pediatric depression.

* FDA approved for depression (not MDD)

FDA = U.S. Food and Drug Administration; MDD = major depressive disorder; n/a = not applicable; tabs = tablets; soln = solution; caps = capsules; OCD = obsessive-compulsive disorder; asso. = associated; w/ = with; d/o = disorder; combo = combination; IR = immediate-release

The above drug information was compiled using IBM Micromedex® and the prescribing information for individual products, where applicable.

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PROVIDER RESOURCES:

- American Academy of Child and Adolescent Psychiatry (AACAP): Depression Resource Center https://www.aacap.org/AACAP/Families_and_Youth/Resource_Centers/Depression_Resource_Center/Resources_for_Clinicians_Depression.aspx
- AACAP/American Psychiatric Association (APA): Depression: Parents' Medication Guide https://www.aacap.org/App_Themes/AACAP/docs/resource_centers/resources/med_guides/DepressionGuide-web.pdf
- Guidelines for Adolescent Depression in Primary Care (GLAD-PC) Toolkit http://www.glad-pc.org/
- National Institute of Mental Health (NIMH): Major Depression https://www.nimh.nih.gov/health/statistics/major-depression.shtml
- Substance Abuse and Mental Health Services Administration (SAMHSA): Evidence-Based Practices Resource Center https://www.samhsa.gov/ebp-resource-center

- National Federation of Families for Children's Mental Health (NFFCMH): Resources https://www.ffcmh.org/resources

Disruptive Mood Dysregulation Disorder (DMDD)

CLINICAL PEARLS

- DMDD remains a relatively new diagnosis with limited evidence to support pharmacological treatment of core symptoms.
- Core symptoms include temper outbursts that occur at frequent intervals that are not considered developmentally appropriate.
- It is important to rule out other diagnoses that have supported evidence-based treatments (e.g. ADHD, depression, anxiety, ODD, etc.) If comorbid diagnoses exist treatment should include addressing those as well.
- First-line treatment should include therapeutic support.
- Medication uses often guided by post-hoc studies on disruptive behavior disorders.

RATING SCALES

- The Modified Overt Aggression Scale can be used to screen and track treatment response. https://depts.washington.edu/dbpeds/Screening%20Tools/Modified-Overt-Aggression-Scale-MOAS.pdf

TREATMENT APPROACH

Stage 1: If comorbid diagnosis (e.g. ADHD, Depression) exist, treat comorbid diagnosis with optimal evidence based intervention and monitor for improvement in symptoms.

Stage 2: Behavioral therapy focusing on targeted behaviors.

Current supported therapies include:

- delayed goal attainment
- cognitive behavioral therapy (with parent management training)
- play therapy
- interpretation bias training
- dialectical behavioral therapy adapted for children.

2A: Monitor for treatment response with rating scale. If improving continue therapy, if not improving follow up with therapist.

Stage 3: Consider use of methylphenidate if concerns with impulsivity/hyperactivity and DMDD symptoms (caution with comorbid trauma-reactive symptoms).

Stage 4: If symptoms of aggression persist, consider the aggression guidelines.

Stage 5: If symptoms are severe and not responsive to stimulant medication, stop stimulant medications and include a trial of second-generation antipsychotic (e.g. risperidone or aripiprazole).

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RESOURCES

- Child Mind Institute
  https://childmind.org/guide/guide-to-disruptive-mood-dysregulation-disorder/
- National Institute of Mental Health
  https://www.nimh.nih.gov/health/topics/disruptive-mood-dysregulation-disorder-dmdd/disruptive-mood-dysregulation-disorder.shtml

Eating Disorders (ages 6–18 years)

- Anorexia Nervosa
  - Restricting type
  - Binge-eating/purging type
- Bulimia Nervosa
- Binge-Eating Disorder

Please note that DSM-5 includes with the eating disorders the feeding disorders of pica,and rumination disorders, These will not be discussed in the context of these guidelines. Avoidant/restrictive food intake disorder is discussed in the 0-5 section.

- All Pediatricians and mental health clinicians should screen child and adolescent patients for eating disorders.
- Pediatricians play an important role in the screening for eating disorders as they often see youth over a trajectory as opposed to a snapshot in time.
- Weight loss (or lack of normative gain) for ANY reason is often a precipitant of eating disorders
- Early intervention does lead to better outcomes.
- The average length of time between onset of symptoms and diagnosis is up to 16 months.

SCREENING TOOLS: ADOLESCENTS

- The Eating Disorder Examination Questionnaire (EDE-Q): https://www.corc.uk.net/media/1273/ede-q_quesionnaire.pdf
- Eating Disorder Inventory (EDI): https://www.parinc.com/Products/Pkey/103
- Eating Attitudes Test (EAT): https://www.seattlechildrens.org/globalassets/documents/healthcare-professionals/pal/ratings/eat-26-rating-scale.pdf
- SCOFF Questionnaire: https://www.bmj.com/content/319/7223/1467

SCREENING TOOLS: YOUNGER CHILDREN

- The Kids' Eating Disorder Survey (KEDS), https://www.ncbi.nlm.nih.gov/pubmed/8340308
- Child-Eating Attitudes Test (CHEAT), https://pubmed.ncbi.nlm.nih.gov/7833961/
- SCOFF, https://www.bmj.com/content/319/7223/1467

CLINICAL PEARLS: ANOREXIA NERVOSA (AN)

- Weight loss for any reason is often if not always a presenting factor for restrictive eating disorders
- In primary care the review of the growth chart can be essential in diagnosing eating disorders
- Weight bias and reluctance to diagnosis can hinder evaluation and treatment outcomes
- AN has a crude mortality rate of approximately 5% per decade either from medical complications or suicide. This is the HIGHEST MORTALITY rate of all mental health disorders.
- Prevalence with AN for females to males is 10:1.
- 55.2% of patients have a lifetime comorbidity of at least one other psychiatric disorder.
- Possible diagnostic clues: avoidance of "fattening" foods, frequent weighing, excessive exercise, baggy or layered clothes and excessive water intake.
- Children with AN are less likely than adults to engage in purging and binging behaviors.
- AN and Obsessive Compulsive Disorder (OCD) share obsessional preoccupations and obsessions and make it difficult to differentiate the two disorders.
- The course of AN is often marked by remission and exacerbation.

CLINICAL PEARLS: BULIMIA NERVOSA (BN)

- BN has a crude mortality of 2% per decade from medical complications or suicide.
- Co-occurring psychopathology in children and adolescents is quite high at a rate of up to 88% lifetime risk. Depression, anxiety and substance abuse are most common.
- Weight is often normal or high-normal for age, gender and height.
- Female to male ratios range from 1:3 to 1:10.
- The course is marked by remission and exacerbation.

CLINICAL PEARLS: BINGE-EATING DISORDER (BED)

- May be the most common eating disorder in the overall population. Rates in children and adolescents are estimated to be 2.3% in adolescent females and 0.8% in adolescent males.
- 9% of adolescents have reported binge episodes without meeting the diagnostic criteria for the disorder.
- Onset is usually in later adolescence or early adulthood.
- The child or adolescent is often overweight or obese.
- BED heritability lies between 30–80% and tends to aggregate in families.

TREATMENT APPROACH:

We have listed stage 1 and stage 2 in treatment approach. Below is a summary table adapted from the AACAP "Practice Parameters for the Assessment and Treatment of Children and Adolescents with Eating Disorders" at the end of this segment. PLEASE NOTE: The research into use of medications with eating disorders in children and adolescents is very limited. The morbidity and mortality of eating disorders in children and adolescents is very serious.

Treatments for Child and Adolescent Eating Disorders Adapted from American Academy of Child and Adolescent Psychiatry Practice Parameters for the Assessment and Treatment of Children and Adolescents with Eating Disorders			
Treatment	**Treatment Targets**	**Evidence Base**	**Recommendations**
Family-based treatment (FBT)	Family therapy supports parental management of eating and related behavior until adolescent demonstrates improvement.	Six randomized controlled trials (RCTs) support efficacy for AN; superiority over other treatments unclear; two RCTs supporting usefulness for BN.	Useful for most cases of short-duration AN and BN in young patients.
Adolescent-focused therapy	Individual therapy targets autonomy and self-efficacy in the context of adolescent development.	This treatment has been the subject of two RCTS in which it performed worse than FBT for AN but was still effective.	Useful for adolescents with AN when FBT is not feasible.
Cognitive-behavioral therapy (CBT)	Individually-focused therapy targets adolescent management of behaviors and distorted cognitions associated with AN and BN.	This treatment has been the subject of one RCT and one case series. No published studies of CBT for adolescent AN.	Adolescent version of CBT for adolescents may be appropriate for use with BN.
Interpersonal psychotherapy (IPT)	IPT focuses on changing problematic interpersonal relationships that trigger or maintain eating disorder symptoms.	Two RCTs in adults with BN and BED support the use of IPT for these disorders.	Useful for cases of BN and BED as an alternative to CBT.
Antidepressants	Symptoms of obsessionality, anxiety, and depression in AN and BN; targets binge eating and purging in BN.	One uncontrolled trial suggests that antidepressants are tolerated and may be helpful for adolescent BN.	Useful for comorbid disorders; and may be a second-line treatment for adolescent BN.
Atypical antipsychotics	Body image distortion, weight-gain fears, and anxiety related to AN.	Case series data and three pilot RCTs insufficient evidence to suggest efficacy for use in AN.	Useful for comorbid conditions; further study needed to determine efficacy for core symptoms of AN.

Note: AN = anorexia nervosa; BED = binge eating disorder; BN = bulimia nervosa; CBT = cognitive-behavioral therapy; FBT = family-based treatment; IPT = interpersonal psychotherapy; RCT =randomized controlled trial.

Stage 1: Diagnostic assessment.

- Beware of "disordered eating" formulation as this can often delay treatment. Care should be taken to judiciously diagnosis an eating disorder if the child/adolescent is meeting criteria.
- It is strongly recommended the assessment be done by clinicians who are experienced with the evaluation of eating disorders in children and adolescents and their families.
    - In youth, distorted body image or refusal to see seriousness of current low weight, intense fear of gaining weight and behaviors that sabotage weight gain should be considered. It is important to note that amenorrhea and refusal to maintain a healthy weight >85% of Ideal Body weight are not necessary for a diagnosis.
- Weight Bias and cultural bias can impact the recognition of this illness, it is important for the clinician to have an inclusive aspect in assessment
- This includes a complete physical exam, BMI and EKG. It also includes complete lab studies. The differential diagnosis for weight loss in children and adolescents is extensive and requires an experienced clinical evaluation.

Stage 2: Treatment of eating disorders in children/adolescents involves a multidisciplinary team skilled in the care of children and adolescents in the treatment of eating disorders. This team may include physicians, nutritionists, psychologists, therapists, occupational therapists, family members, teachers, etc.

Anorexia Nervosa:

1. Physical signs and medical complications, including malnutrition need to be treated.
    - If malnutrition is not addressed it is highly likely that any comorbid anxiety and/or depression will not remit.
2. Treatment usually begins in an outpatient setting. Hospitalization is usually indicated if there is substantial or rapid weight loss, especially weight below 75% of normal age-appropriate weight or with significant medical issues, including low potassium, unstable vital signs, or uncontrolled insulin abuse. Hospitalization may also be indicated with severe depression, suicidal plans, substantial psychiatric comorbidity, or substantial substance abuse.
3. Families should be encouraged to incentivize appropriate eating.
    - Facilities are often considered the experts in contingencies and treat eating as a BEHAVIOR (which it is).
    - Families should be aware it is ok to set limits.
    - Patients should eat breakfast/lunch/dinner and at least one snack per day
    - Mechanical eating is necessary for most patients with eating disorders and hunger/fullness can be disrupted for up to 2 years or more

4. Therapy: Therapeutic approaches usually combine individual psychotherapy, family therapy, nutritional counseling, and group therapy.

5. Medications: There are NO medications approved for treatment of AN in children or adolescents. The results overall have shown little or no benefit of use of medications in this population for actual treatment of the eating disorder.

Antidepressants are often used to treat comorbid depressive, anxiety or obsessive-compulsive symptoms in adults and adolescents with AN. Tricyclic antidepressants and monoamine oxidase inhibitors should be avoided in this population due to sensitivity to side effects. Wellbutrin (bupropion) should NOT be used in eating disorders where PURGING is present because of the lowering of the seizure threshold.

Cyproheptadine (antihistamine) and mirtazapine (antidepressant) have been used to increase appetite and help with sleep in some adults and adolescents with AN.

Olanzapine (antipsychotic) and quetiapine (antipsychotic) have been used with some success to assist with weight restoration and sleep in adults and adolescents. They have been used to assist with the almost delusional and obsessive aspects that can sometimes be observed in AN.

Bulimia Nervosa:

1. Therapy: Therapeutic approaches usually combine individual psychotherapy, family therapy, nutritional counseling, and group therapy. It is strongly recommended that the clinicians treating BN in children/adolescents be well experienced in the treatment of eating disorders.

2. As stated above families should be encouraged to incentivize appropriate eating.

3. Families should have an awareness that bathrooms are not often a place of wellness if you have an eating disorder and a strategy to monitor the bathroom might be needed.

4. There is NO medication approved to treat BN in children or adolescents.

5. Fluoxetine in doses up to 60mg per day is approved for BN in adults. The study of fluoxetine use for BN in adolescents has been very limited but overall had positive results. Other SSRIs have been used with BN at various doses in adolescents. The response was positive but not as robust as with fluoxetine. Wellbutrin (bupropion) SHOULD NOT be used in eating disorders where PURGING is present because of the lowering of the seizure threshold.

6. Bulimia is usually treated outpatient. Hospitalization should be considered for patients with severe depression, self-harming behaviors, suicide plans, or severe medical complications (hypokalemia).

Binge-Eating Disorder (BED):

1. Therapy: Therapeutic approaches usually combine individual psychotherapy, family therapy, nutritional counseling, and group therapy. CBT is considered a mainstay. Therapy may include dialectical behavior therapy (DBT) and interpersonal therapy since BED tends to be seen in older adolescents and young adults.
2. There are NO medications FDA-approved for BED in children and adolescents.
3. Vyvanse (lisdexamfetamine) is approved for BED in adults. It is thought to reduce the impulsivity associated with the disorder.
4. Fluoxetine and other SSRIs are often used for BED in adults and adolescents. They are used to reduce associated anxiety, depression, and the frequency of binge-eating episodes. Wellbutrin (bupropion) should not be used in eating disorders where PURGING is present because of the lowering of the seizure threshold.

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CAREGIVER RESOURCES

feast-ed.org

Obsessive Compulsive Disorder (OCD)

CLINICAL PEARLS

- Pediatric OCD has a prevalence rate of about 1–2%, but it often goes undiagnosed due to the secretive nature of symptoms. A substantial number of pediatric-onset OCD cases will become sub-clinical over time. About one third of adult OCD cases have childhood onset.[1]
- OCD is strongly familial. Non-genetic factors have also been studied, including immune response to Group A beta-hemolytic strep infection (i.e. PANDAS).[2]
- Children and adolescents have higher rates of aggressive/harm obsessions (fear of catastrophic events, such as death or illness of a loved one or themselves).
- Among compulsions, hoarding is seen more often in children and adolescents than adults. As with adults, children and adolescents typically have multiple obsessions and compulsions.
- Children may present primarily with compulsive behaviors, with poor insight into obsessions or limited ability to communicate them due to developmental stage.[1]
- Medication alone leads to 30-40% reduction in OCD symptoms, leaving clinically significant symptom burden in moderate-to-severe cases. For this reason, combination treatment with cognitive behavior therapy (CBT) and medication is strongly recommended.[3] Alone or in combination with medication, patients treated with CBT show higher probability of improvement and remission.[4]

RATING SCALE

- Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS)
  https://www.mcpap.com/pdf/CYBOCS.pdf

TREATMENT APPROACH

Stage 1: Diagnostic assessment including clinical interview based on DSM-5 criteria and CY-BOCS administered by a clinician. Assessment for comorbid psychiatric disorders should be included.[2]

Stage 2: Cognitive behavior therapy* with elements of exposure and response prevention is first line treatment for OCD and can be used as monotherapy in mild-to-moderate cases.[2]

*Virtual CBT has been shown to be effective in treating OCD symptoms in youth and might be deemed more appropriate than in-person therapy that IS NOT CBT.[6,7]

Stage 3: For moderate-to-severe OCD (CY-BOCS score >23) or failure to respond to CBT alone, combination treatment with CBT and medication is indicated.

- Start an SSRI (sertraline, fluoxetine, fluvoxamine) with titration to the maximum effective dose.[5]

Stage 4: If minimal or no response after eight to 10 weeks on maximum recommended or maximum tolerated dose, switch to another SSRI.[2]

Stage 5: Medication augmentation should be considered if partial response to initial SSRI treatment or no response to two adequate SSRI trials. Augmentation of SSRI with low dose clomipramine (dose 25–75 mg) has been shown effective.[3]

- Clomipramine has risk of arrhythmia and should be used with caution if personal or family history of heart disease exists. Baseline EKG should be obtained. It can interact with some SSRIs, leading to increases in serum clomipramine levels.[2]
- Caution and monitoring for medication interactions. CYP-450 2D6 inhibitors (fluoxetine) can increase serum clomipramine levels.

Stage 6a: If only partial response or no response to adequate trials of two SSRI or SSRI and augmentation with clomipramine, consider augmentation with an atypical antipsychotic. Risperidone and aripiprazole have the most evidence in pediatric populations.[2]

- Baseline and follow-up weight, fasting lipid, and serum glucose profiles required.

Stage 6b: An additional augmentation option would be the use of N-acetlycysteine (NAC).[5] Studies have shown that up to 2400 mg- 2700 mg in divided doses has been effective in treating OCD symptoms in youth.

NAC typically starts 900mg po Qday for 2 weeks, increases to 900 mg po BID for 2 weeks and can increase to 900mg po TID if indicated.

Drug	Typical Dose Range
Sertraline	50 mg - 200 mg
Fluoxetine	10 mg- 80 mg
Fluvoxamine	50 mg – 300 mg
Citalopram*	10 mg – 40 mg
Escitalopram*	10 mg – 20 mg

*Citalopram and Escitalopram are not FDA-approved for OCD and were not included in large studies for pediatric OCD.

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OTHER RESOURCES

- International OCD Foundation: Provides educational resources, community events, outreach programs, advocacy, and professional training opportunities. https://iocdf.org/
- Obsessive Compulsive Disorder Resource Center American Academy of Child & Adolescent Psychiatry. https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Obsessive-Compulsive-Disorder-In-Children-And-Adolescents-060.aspx
- Talking Back to OCD: The Program That Helps Kids and Teens Say "No Way"—and Parents say "Way to Go" by Dr. John March. https://www.amazon.com/Talking-Back-OCD-Program-Parents/dp/1593853556/ref=sr_1_1?s=books&ie=UTF8&qid=1477686075&sr=1-1&keywords=talking+back+to+ocd

Oppositional Defiant Disorder and Conduct Disorder

CLINICAL PEARLS

- Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) are considered a spectrum of disruptive behavior disorders.
- First-line treatment should include a culturally-sensitive, family-based therapy.
- Conduct Disorder with callous and unemotional traits holds a worse prognosis.
- Comorbidity with ADHD, anxiety, substance use, depression, and trauma-related symptoms is common. If indicated, pharmacological treatment should focus on comorbid diagnosis if therapy is not effective.
- Often treating ADHD will help reduce impulsive aggression.
- Medications are typically reserved for severe disruptive and aggressive behavior.

RATING SCALES

- Vanderbilt Assessment Scales https://www.nichq.org/sites/default/files/resource-file/NICHQ_Vanderbilt_Assessment_Scales.pdf
- Children's Aggression Scale https://www.parinc.com/products/pkey/38

TREATMENT APPROACH

Stage 1: Family-based therapy (e.g. parent-child interaction therapy and Triple P for ODD, multisystemic therapy, functional family therapy for CD) is considered first-line, including school and other systems when indicated.*

THERAPY PRINCIPLES

- Encourage quality time between caregiver and child.
- Reduce positive reinforcement of disruptive behavior.
- Increase reinforcement of prosocial and compliant behaviors (parental attention is imperative).
- Apply consequences for disruptive behavior.
- Make parental responses predictable, contingent and immediate.

1A: Monitor for treatment response with rating scale. If improvement is noted, continue therapy. Otherwise, follow up with therapist.

Stage 2: If symptoms persist or comorbid anxiety/depression/ADHD, ensure adequate treatment for comorbid disorders.

Stage 3: Monitor for treatment response. If patient is not improving and/or aggression is severe, consider protocol for managing aggressive behaviors.

*Boot Camps, scared-straight scenarios are not recommended.

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OTHER RESOURCES

- Lives in the Balance https://www.livesinthebalance.org/
- *The Explosive Child*, by Dr. Ross Green
- Blueprints for healthy youth development https://www.blueprintsprograms.org/program-search/

PTSD and Trauma-Related Disorders 6–17 years

- Posttraumatic Stress Disorder (lasting over one month)
- Acute Stress Disorder (lasting up to one month)
- Adjustment Disorders (occurring within three months of stressor, not meeting criteria for above)

CLINICAL PEARLS

- Exposure to trauma is common; by the end of adolescence more than half of young people will have been exposed to a traumatic event. Screening for trauma/stressors when behavioral/emotional problems emerge is imperative for an accurate diagnosis.
- First line-treatment is a trauma-focused therapy (e.g. trauma-focused cognitive behavioral therapy, eye-movement desensitization and reprocessing therapy).[10]
- To date there is limited high quality evidence to support the use of pharmacological treatment of PTSD in pediatric patients. Medications are often used to treat the underlying symptoms of the disease.
- Screening for abuse and trauma should occur in a developmentally appropriate environment, which includes interviewing the child or adolescent alone.
- If abuse is suspected the DHS hotline should be called 800-522-3511.
- Comorbidity with ADHD, anxiety, substance use, depression and others is common. If comorbid diagnosis is not improving with treatment, a trauma-focused treatment should be implemented.[14]

IN-OFFICE TECHNIQUES

The PRACTICE SKILLS implemented in trauma therapy often include: grounding techniques like deep breathing, mindfulness meditation, sensory awareness exercises, progressive muscle relaxation, cognitive restructuring to challenge negative thoughts, journaling, art therapy, body-centered practices like somatic experiencing, and developing coping mechanisms to manage triggers and emotional dysregulation; all aimed at helping individuals regulate their nervous system, process traumatic memories, and build resilience.

Research has shown that individuals who have experienced Adverse Child Hood Events (ACES) can increase resilience and healing through PACES (protective and compensatory experiences). We would encourage providers to explore PACES with their pediatric patients.[15]

Protective & Compensatory Experiences (PACE)	
Connectedness/Belonging	**Structure/Predictability**
Had someone who loved you unconditionally	Had an engaging hobby (artistic, intellectual pasttime)
Had at least one best friend	Went to a school with the resources and activities necessary for learning
Regularly did something to help others along or with others	Lived in a home with enough food and was typically clean and safe
Had a trustworthy adult (not a parent) to turn to for help or advice	Was involved in an organized sports group or other activity
Was active in at least one civic or non-sport social group	Lived in a home where rules were clear and fairly administered

RATING SCALES

- Child PTSD Symptom Scale https://www.aacap.org/App_Themes/AACAP/docs/resource_centers/resources/misc/child_ptsd_symptom_scale.pdf
- Child and Adolescent Trauma Screen (CATS) http://oklahomatfcbt.org/audiences/tf-cbt-therapists/assessment-resources/

TREATMENT APPROACH

Stage 1: Trauma-focused therapy including parent/guardian*.

- Trauma-focused cognitive behavioral therapy (TF-CBT)
- Seeking safety
- Cognitive-behavioral interventions for trauma in schools
- Eye-movement desensitization (EMDR)
- Reprocessing therapy
- Cognitive behavioral therapy for nightmares in children (CBT-NC)[17]

*Bio and/or NeuroFeedback MAY be helpful for some patients with PTSD; however studies are quite small.[18,19]

1A: Monitor for treatment response with rating scale. If improving, continue therapy, if not improving, follow up with therapist.

Stage 2: With comorbid symptoms not responsive to therapy medication may be indicated.

2A: With Comorbid Anxiety or Depression: If symptoms persist or comorbid anxiety/depression consider starting SSRI[10] (e.g. citalopram[11] or fluoxetine[16]) four to six weeks for treatment response in combination with trauma-focused therapy.

2B: with Comorbid Hypervigilant Response/Hyperarousal: Monitor for treatment response if not improving consider clonidine[3]/guanfacine[4] (four to six weeks for treatment response) in conjunction with a trauma-focused therapy.

2C: If nightmares are the primary symptoms, may consider Prazosin 1mg po QHS increase by 1mg po Q week; not to exceed 5mg po QHS. (Important to note risk of return of symptoms once Prazosin is discontinued.)

Stage 3: If aggression is a significant symptom that does not respond to interventions above, consider the aggression protocol included in this document.

Stage 4: If symptoms are not improving, consider referral to child and adolescent psychiatry.

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OTHER RESOURCES

- National Child Traumatic Stress Network: www.nctsn.org
- Oklahoma TF-CBT: http://oklahomatfcbt.org/audiences/tf-cbt-therapists/assessment-resources/

Sleep Disorders

- Approximately 25% of all children will experience a form of sleep disorder during childhood. The spectrum ranges from transient difficulty with sleep onset or night awakenings to obstructive sleep apnea.
- Work up for sleep disorders should include ruling out organic causes like obstructive sleep apnea, pharmacological side effects (e.g. medications, caffeine, cannabis) and restless leg syndrome.
- Clinicians should be mindful of developmental stages that can potentially impact sleep patterns (e.g. losing afternoon nap in younger children, social jet lag in adolescents).
- Sleep begets more sleep and it is imperative to ensure that children and adolescents are receiving the optimal amount of sleep each night.

Age	Sleep Recommendation	Notes
4–12 months	12–16 hours per 24 hours	
1–2 years	11–14 hours per 24 hours	
3–5 years	10–13 hours per 24 hours	When the afternoon nap falls off, bedtime might need to be moved earlier to ensure adequate sleep.
6–12 years	9–12 hours per 24 hours	Consistent nighttime routines are imperative for good sleep health.
13–18 years	8–10 hours per 24 hours	Adolescents typically shift their bedtime later naturally, and morning wakefulness might need to be adjusted.

CLINICAL PEARLS (SLEEP-ONSET INSOMNIA):

- Behavioral modification is the mainstay of treatment. Consider entire family routines and circumstances, sleep environment, and previous interventions.
- Rule out sleep-disordered breathing, adverse effects of other pharmacologic treatment or substances (e.g. caffeine or cannabis) and psychiatric co-morbidities (e.g. autism, anxiety, ADHD).
- The Food and Drug Administration (FDA) has not approved any prescription hypnotic for use in people younger than 18 years of age. The family should be informed of "off label" use.
- Adjunctive pharmacotherapy may be considered when tailored to patient age and comorbidities; and should be short-term.

RATING SCALES (SLEEP-ONSET INSOMNIA):

- Children's Sleep Habits Questionnaire: http://njaap.org/wp-content/uploads/2016/04/Childrens-Sleep-Habits-Questionnaire.pdf
- BEARS Sleep Screening Tool: https://www.med.upenn.edu/cbti/assets/user-content/documents/BEARS%20Sleep%20Screening%20Tool.pdf

TREATMENT APPROACH (SLEEP-ONSET INSOMNIA):

Stage 1: Behavioral supports in the home: sleep logs to monitor sleep, stimulus control therapy, sleep hygiene therapy, behavior modification therapy, CBT-i Coach app for smartphone.

Stage 2: Referral for therapy and mental health support.

Stage 3: Non-prescription drug: melatonin.

- Dosages start 0.3-0.5mg 30-45 minutes before bedtime (for Sopoforic effects)
- 1-3mg/day is typical with a maximum of 10mg/day (Typically dosages over 5mg are no more effective)
- 0.3m-0.5mg 5-6 hours before bedtime can be used for chronotropic effect

Stage 4: Clonidine immediate release 0.05mg by mouth one hour before bedtime. Titrate dose in 0.05mg not to exceed 0.2mg of immediate release. Monitor patient for concerns of hypotension or rebound hypertension. Medications for sleep should be time limited.

4A: If clonidine is not effective, consider Trazodone starting at 25mg. In adolescents up to 100mg has been effective. (or)

4B: If clonidine not effective consider Remeron 7.5mg. Remeron is typically thought to be more sedating at lower dosages.

CLINICAL PEARLS (NIGHTMARES):

- Nightmares are common in children and typically resolve by age six (but may increase again during adolescence), reassurance of parental anxiety is important.
- Nightmares are a core feature in Post-Traumatic Stress Disorder and are also seen in anxiety and affective disorders; ruling out an underlying diagnosis is important.
- Nightmares and other sleep disturbances can cause stress on family systems.
- First-line treatment should include psychoeducation and behavioral management.
- Medications (if indicated) for treatment should be short-term and in conjunction with behavioral therapy.
- Nightmares differ from night terrors, which are often more distressing to the family opposed to the child.

RATING SCALES (NIGHTMARES):

Limited scales for assessment, consider use of a sleep log that documents sleep and nightmares. https://www.choc.org/wp/wp-content/uploads/2016/04/Children-Sleep-Diary-Vers_2.pdf

TREATMENT APPROACH (NIGHTMARES)

Stage 1: Review current prescribed and over-the-counter medications to ensure they are not exacerbating problem (e.g. antidepressants, stimulants and neuroleptics).

1A: Sleep Hygiene (see resources below).

Stage 2: In-office techniques; progressive muscle relaxation, nightmare rescripting, imagery rehearsal, etc. (see resources below).

Stage 3: Refer to a licensed therapist.

Stage 4: If therapy is not effective, consider use of prazosin[1] (important to counsel family on the expectation of decreased number of nightmares as opposed to total elimination).*The dose range of prazosin was 1–15 mg at every bedtime (0.02–0.3 mg/kg),

*Long-term treatment with medications is not recommended.

CLINICAL PEARLS (NIGHT TERRORS):

- Sleep terrors (often called night terrors) typically occur between 4 and 12 years of age.
- The events occur during the first one-third of nocturnal sleep, typically the N3 stage which differs from nightmares as they occur during REM stage.
- Episodes are dramatic but benign; episodes involve sudden screaming, intense fear, tachycardia, and autonomic activation, but the child is inconsolable and has no memory of the event upon awakening. Unlike seizures, there is no postictal confusion.
- Common triggers include sleep deprivation, stress, fever, and irregular sleep schedules.
- Night terrors are self-limited and typically resolve with age. Educate parents to avoid awakening the child during an episode and to ensure a consistent sleep routine to reduce recurrence.

RATING SCALES (NIGHT TERRORS):

Limited scales for assessment, however the Sleep Disturbance Scale for Children (SDSC) can be utilized: https://www.med.upenn.edu/cbti/assets/user-content/documents/Sleep%20Disturbance%20Scale%20for%20Children%20(SDSC).pdf

TREATMENT APPROACH (NIGHT TERRORS):

Stage 1: Obtain a thorough history focusing on the timing, frequency, duration, and description of the episodes. Utilize the SDSC to help to determine severity.

1A: Differentiate night terrors from other conditions, such as nightmares (occur in REM sleep with recall), nocturnal seizures (stereotyped movements, postictal confusion), or obstructive sleep apnea (snoring, pauses in breathing).

1B: Educate caregivers about the benign and self-limiting nature of night terrors, emphasizing that the child will not remember the episode and should not be awakened during it.

Stage 2: Sleep hygiene (see Resources below), limit triggers, and provide safety precautions

2A: Advise a consistent bedtime routine with structured, relaxing activities before sleep. Ensure adequate sleep duration based on age-specific recommendations (e.g., 9–12 hours for school-age children). Minimize sleep deprivation and stress, which are common triggers. Avoid stimulants (e.g., caffeine) and electronics before bedtime to improve sleep quality.

2B: Ensure a safe sleeping environment by removing sharp objects and placing barriers on beds to prevent injury. Lock windows and doors to prevent sleep-related wandering.

Stage 3: Behavioral interventions for frequent or severe cases

3A: Scheduled awakenings: If episodes occur frequently and at predictable times, wake the child 15–30 minutes before the usual time of the event to disrupt the sleep cycle.

Stage 4: Consider referral to a sleep specialist for persistent, frequent, or severe cases. Parasomnographs can be ordered and are indicated in the following clinical scenarios: suspecting OSA, RLS, Periodic limb movement disorder, nocturnal seizures, safety concerns secondary to dangerous behaviors while asleep, excessive disruption of family's sleep, or REM sleep behavior disorder.

Stage 5: Pharmacologic therapy (only for severe, refractory cases); Medication is rarely needed but may be considered if night terrors cause significant distress or risk of injury.

5A: Melatonin, 1-10mg per night, given by mouth 30 minutes before bedtime. If considering additional medications please contact SPARK

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OTHER RESOURCES:

- American Academy of Pediatrics
- American Academy of Sleep Medicine
- American Family Physician
- CBT-i Coach application for smartphone (free; developed by US Department of Veterans Affairs)
- Healthychildren.org
- National Sleep Foundation: https://www.sleepfoundation.org/articles/children-and-bedtime-fears-and-nightmares
- Sleep Log via Stanford Sleep Health and Insomnia Program: https://med.stanford.edu/insomnia/resources.html

Substance Abuse

CLINICAL PEARLS

- Alcohol and marijuana are the most common non-prescription agents abused by Oklahoma high school students. Pain medications and stimulants are the most common prescriptions abused by Oklahoma high school students.
- There has been a decline in traditional tobacco use over the past several years; but Oklahoma still has as much as 1 in 5 students reporting the use of vaping. It is important to note vaping is not considered a safe alternative to cigarette smoking.
- Substance use correlates with risk-taking behaviors (e.g. unprotected sex, impaired driving).
- Confidential care and screening are recommended every time an adolescent receives medical care. Substance Use Disorders meet criteria for self-consent by minors in Oklahoma. Parent involvement should be encouraged when appropriate, but not mandated.
- Substance use goes undetected by nearly two-thirds of primary care providers.
- Providers are encouraged to use medications with lower abuse potential when treating comorbid conditions (e.g. atomoxetine for ADHD).

RATING SCALES:

- Screening to Brief Intervention (S2BI): https://www.mcpap.com/pdf/S2BI_postcard.pdf
- Car, Relax, Alone, Forget, Friends, Trouble (CRAFFT): https://www.crafft.org

TREATMENT APPROACH:

Screening, Brief Intervention, Referral to Treatment (SBIRT) Use of the SBIRT process is an evidence-based practice model shown to identify, reduce, and prevent substance abuse. The model is designed for use across multiple medical settings including primary care and community health centers. Physician and administrative champions are helpful when implementing an SBIRT approach, however specific screening and assessment functions can be effectively accomplished by medical assistants and other clinical and administrative staff.	
Stage 1: Screening	• Anticipatory guidance: Encourage parents to discuss healthy, substance-free means to express or resolve feelings such as elation, stress, disappointment or pain. • Recommend abstinence as the best health advice for teens and advise parents to set a clear "no use" policy around alcohol, tobacco and other drug use. • Administer S2BI screening tool every time an adolescent patient receives medical care to address use of tobacco, alcohol, and other legal and illegal drugs. • Implement use of the "5 A's" tobacco-specific tool when patients and/or parents express a desire to stop smoking.

Stage 2: Brief Intervention	Screening result **"Never"**	Provide positive reinforcement.
	Screening result **"Once or twice"**	• Unlikely to have substance abuse disorder. • If opioid abuse is suspected or confirmed, provide patient training on use of naloxone. • Provide physician-delivered advice to quit, combined with a brief explanation of the negative impacts on health. (See Appendix C of Adolescent Toolkit for complete discussion of negative health consequences.) http://files.hria.org/files/SA3541.pdf
	Screening result **"Monthly"**	• Provide motivational interventions: short, structured conversations based on the principles of motivational interviewing (MI); clinician explores problems, recognize ambivalence, listens for "change talk." • Implement use of the "5 R's" to increase tobacco-specific motivation to quit. • Use CRAFFT questions to generate interventions. • Provide clear advice to quit. • Co-develop a specific change plan to target high-risk behaviors. • Schedule follow-up appointment.

Stage 2: Brief Intervention	Screening result **"Weekly or more"**	• Offer referral to counselors who are skilled at working with youth substance-use disorders (motivational interviewing, cognitive behavioral therapy, contingency management, etc.). Using MI techniques may facilitate referral acceptance. • Ask for permission to discuss screening results with parents or guardians. • Evaluate and treat co-occurring mental health disorder(s). • Establish plan for ongoing toxicology screenings.
	Acute danger	• Evaluate suicidality risk. • Assess risk of abuse from parent or guardian, then explain need to break confidentiality. Inform parents or guardians with input from patient. • Initiate "safety plan" until next appointment. • Refer to substance abuse specialist for urgent evaluation. • Provide monitoring advice for parents, including use of naloxone. • (See pg. 27 of Adolescent SBIRT Toolkit.) http://files.hria.org/files/SA3541.pdf

Stage 3: Referral to Treatment	• Conduct comprehensive biopsychosocial assessment.
	• Refer to least restrictive environment that supports clinical needs.
	  ○ Outpatient, inpatient and residential treatment options are available to children and adolescents
	• Use medical home to provide continuity of care and coordinate specialty services.
	• Review hepatitis A and B vaccination status and complete missing vaccinations.
	• Alcohol use disorder:
	  ○ Medications to target alcohol cravings and withdrawal have not been evaluated for use in children and adolescents. Their use could be considered in the most treatment-resistant circumstances. Agents include:
	  ▪ Alcohol craving: naltrexone, acamprosate, ondansetron
	  ▪ Naltrexone 50mg po Qday, can transition to 380 mg IM Q month
	  ▪ Disulfiram 200mg po Qday for alcohol use moderate/severe. Must monitor liver function tests. Less commonly used due to side effects.

Stage 3: Referral to Treatment (Additional Treatments for Opioid Use Disorder)	• Opioid use disorder (AAP offers additional training listed below):
	  ○ Medication-assisted treatment (MAT) is currently recommended by the American Academy for Pediatrics (AAP) for adolescents and young adults with severe opioid use disorder.
	  ▪ Buprenorphine is approved for patients age ≥ 16 years and is available as SL film/tablets, as a single agent or in combination with naloxone.
	  ▪ Suboxone (Buprenorphine/naloxone SL) for moderate to severe
	  ▫ FDA-approved for ages 16+ (off-label use in younger teens is considered case-by-case).
	  ▫ Reduces cravings and withdrawal symptoms, improving retention in treatment.
	  ▫ Lower overdose risk compared to full agonists like methadone.
	  ▫ Naloxone component reduces misuse potential (blocks IV/intranasal abuse).
	  ▫ Induction: Start with 2-4 mg buprenorphine, increase as needed.
	  ▫ Typical Maintenance Dose: 8-16 mg daily (max: 24 mg/day).
	  ▫ Tapering vs. Maintenance: Long-term treatment is often more effective than short tapers.
	  ▫ **Important:** Adolescents should be in mild withdrawal (COWS ≥ 6) before first dose to prevent precipitated withdrawal.
	  ▪ Vivitrol® (naltrexone ER injection) is approved for patients age ≥ 18 years.
	  ▫ Monthly injections; patients must be opioid-free for a minimum of 7 to 10 days prior to initiation of treatment.
	  ▪ Naltrexone FDA-approved > 18 years of age.
	  ▫ Can be provided in primary care setting, no special training is required.
	  ▪ Federally-funded methadone clinic regulations prohibit treatment of patients under age 18 years.
	  ▫ Only administered in person at a qualified methadone center.

Stage 3: Referral to Treatment (Additional Treatments for Cannabis and Tobacco Use Disorder)
 	
cont'd
	• Cannabis Use and Dependence
	  ○ Motivational Interviewing, Behavioral Therapy and Contingency Management based family therapy interventions
	  ○ N-acetylcysteine (NAC) has some evidence to support use at 1200mg po BID
	  ▪ Typically well tolerated with Common side effects:
	  ▪ Mild GI upset (nausea, diarrhea, bloating)
	  ▪ Headache
	  ▪ Unpleasant sulfur-like taste/smell
	  ○ Topiramate 100-200mg po Daily for youth with heavy use
	  ▪ Has shown to decrease grams of cannabis per day.
	  ▪ Side effects can make it difficult to tolerate
	• Tobacco use:
	  ○ Behavior-based treatments are recommended and include counseling, social support, problem solving, encouragement and skills training.
	  ▪ Face-to-face and/or telephonic assistance are recommended and may be delivered individually or in a group setting.
	  ▪ Helpline support services are offered at no charge for Oklahoma citizens; services have no restrictions associated with income, insurance coverage or age.
	  ○ Pharmacotherapy can be considered as an option for adolescents with moderate to severe tobacco dependence.
	  ▪ Medication treatment recommendations for adults include first-line agents (bupropion SR, varenicline and nicotine replacement)
	  ▫ No medications are currently FDA-approved for treatment of tobacco dependence for patients age ≤ 17 years.
	  ▫ Nicotine replacement has been shown safe for adolescents. Patches can offer greater adherence than gum.
	  ▫ Electronic cigarettes and/or "vaping" products are not recommended to treat tobacco dependence.

HARM REDUCTION STRATEGIES

Harm reduction is an evidence-based approach that aims to minimize the negative consequences of substance use rather than focusing solely on abstinence. With teenagers, harm reduction acknowledges that some adolescents may experiment with substances and seeks to keep them safe while promoting healthier choices.

- Never Use Alone
- Avoid using multiple substances at the same time
- designate a specific person to monitor for safety
- recognize signs and symptoms or an overdose
    - Decreased alertness
    - Decreased respiratory rate



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OTHER RESOURCES:

Training to Treat Opioid Use Disorder in Adolescents

Oklahoma State Law – Minor's ability to consent to confidential health services: https://law.justia.com/codes/oklahoma/2014/title-63/section-63-2602

Prevention and Treatment of Substance Use Disorders in Rural Communities Toolkit: https://www.ruralhealthinfo.org/toolkits/substance-abuse

Quick Guide: Adolescent Screening, Brief Intervention, Referral for Treatment (SBIRT): http://files.hria.org/files/SA3543.pdf

University of Oklahoma SBIRT Collaborative: http://www.ou.edu/cas/socialwork/centers-programs/cswh/sbirt (not pediatric specific)

Adolescent SBIRT Toolkit—includes S2BI tool: http://files.hria.org/files/SA3541.pdf

Students Against Destructive Decisions: https://sadd.org/

Alcohol Screening and Brief Intervention for Youth: A Practitioner's Guide—includes motivational interventions: https://www.niaaa.nih.gov/sites/default/files/publications/YouthGuide.pdf

National Institute of Mental Health Suicidality Risk Assessment: https://www.nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit-materials

Oklahoma Substance Abuse Referral: https://www.ok.gov/odmhsas/

National Suicide Prevention Lifeline Safety Plan: https://suicidepreventionlifeline.org/wp-content/uploads/2016/08/Brown_StanleySafetyPlanTemplate.pdf

Oklahoma Prescription for Change Naloxone Training: https://okimready.org/overdose/

U.S. Department of Health and Human Services Abuse Risk Assessment: https://www.childwelfare.gov/topics/systemwide/assessment/family-assess/id-can/

Substance Abuse Treatment Locator: https://www.samhsa.gov/find-treatment

Oklahoma Tobacco Helpline: https://okhelpline.com/, 1-800-QUIT-NOW

Adolescent version of MAT training available for members of AAP: www.aap.org

World Health Organization: Toolkit for delivering the 5 A's and 5 R's brief tobacco interventions in primary care: https://apps.who.int/iris/bitstream/handle/10665/112835/9789241506953_eng.pdf;jsessionid=70EEDF9FBEED2F7C91E30619253ACC80?sequence=1

SoonerCare Tobacco Cessation Benefit: https://okhelpline.com/thinking-about-quitting/soonercare-oklahoma-tobacco-helpline-2/?gclid=CjwKCAjws--ZBhAXEiwAv-RNL9LWLy6bstV8FkAYrIKx8oCuVCsmXLJh3mAWf1f9DzCw6WHtRZjH7BoCvlUQAvD_BwE

Suicidal Prevention Approach and Strategies

CLINICAL PEARLS:

- Rates of completed suicide in the United States have consistently risen over the last two decades with significant increase in 44 states and it is the second leading cause in children and adolescents age 10 to 19 years.
- Universal Screening is important given 17% of all high school students reported suicidal ideation in the last year, while 8% of American high school students report a suicide attempt.
- When treating youth with depression and/or suicidal ideation; psychoeducation about removal of access to firearms, lethal weapons, medications and other potential self-harming items is important in prevention.
- Almost half of suicide attempters have had a primary care physician (PCP) visit within 30 days of attempt and training PCPs in depression recognition and treatment prevents suicide. Active follow up after suicide-related crisis should be routine.
- When treating psychiatric disorders, it is important to use evidence-based treatments. SSRIs are first-line treatments for depressive disorders. Psychotherapeutic interventions with strongest support to address suicidality include dialectical behavior therapy, cognitive behavior therapy and mentalization-based therapies.
- Emerging evidence suggests ketamine may have a significant impact on alleviating suicide ideation. The administration of ketamine should be done in a therapeutic setting with a child and adolescent psychiatrist or psychiatrist with experience working with adolescent patients.
- Crisis hotlines including texting options such as 988 can provide immediate support and can be a critical resource for adolescents in crisis.
- Safety planning using a motivational interviewing approach is a critical intervention for prevention. It includes developing a collaborative plan with youth and family of identifying coping strategies, social support, emergency contacts, developing reasons to live and hope, cognitive restructuring, emotional regulation and distress tolerance techniques.

OBSERVABLE WARNING SIGNS THAT ARE HIGH RISK FACTORS:

Each patient is unique and a comprehensive assessment of risk factors helps identify the level of intervention needed. Intervention can vary from outpatient treatment to inpatient treatment and assessment helps identify the level of treatment needed. Certain warning signs are higher risk and stated below.

- Seeking means to kill oneself, non-suicidal self-injurious behavior and suicide attempts.
- Hopelessness, purposelessness, not belonging.
- Expressions of anger, mood, recklessness.
- Withdrawal from activities and deteriorating grades.
- Seeking out internet sites on how to commit suicide.
- Although there are many rating scales clinical assessment that includes appropriate collateral interviews of parents/ caregivers remains the gold standard for suicide risk assessment.
- Elements listed below are those that might increase risk in several different categories:
    - Psychiatric and Medical history
    - Suicidal ideation
    - Common precipitating factors in adolescents
    - Red flags in mental status
    - Social and familial risk factors

Suicide Risk Assessment Checklist for Children (SRACC)			
Swapna Deshpande, MD, FAPA, DFAACAP			
Psychiatric and Medical History	**Precipitant**	**Mental Status**	**Social History**
Prior suicide attempt	Recent loss(es)	Hopeless	Limited social support for family
Past psychiatric disorder	Academic problem(s)	Anger	Academic difficulty (grades, behavior, attendance)
Past psychiatric hospitalization	Disciplinary problem(s)	Belief that things would be better for self or others if dead	
Current psychiatric symptoms or disorder	Legal problem(s)		History of being bullied
Current or past mental health treatment	Loss/restriction of electronics	Wish to join a dead loved one	Problems related to sexual orientation
Current psychotropic medications	Family conflict	Low self-esteem	Access to means, especially guns
History of non-suicidal self-injury	Interpersonal/peer problems	Psychotic symptoms	
History of physical/sexual abuse	Other		**Family History**
History of trauma	**Nature of Attempt**		
History of disciplinary/legal problems	Medical complication/ lethality of attempt	**Protective Factors**	Family history of suicide
Active alcohol and/or substance abuse	Perceived lethality	In mental health treatment	Family history of mental illness or substance abuse
Impulsive behavior	Planned	Good interpersonal/ supportive peer relationships	
Significant/chronic medical condition	Opportunity for rescue		Chronic conflict or discord
Suicidal Ideation	Persistent wish to die/ regret at being rescued	Family and/or social support and parent connectedness	
Currently present			Does not take child's problems seriously
Frequency and duration	Regret attempt		
Chronicity and pervasiveness		Community involvement e.g., church	
Severity		Intact family	
Current plan		Academic achievement	
Current intent		Healthy	

RATING SCALES

- Columbia Suicide Rating Scale is freely available, validated widely utilized scale: https://cssrs.columbia.edu/wp-content/uploads/C-SSRS_Pediatric-SLC_11.14.16.pdf
- Suicidal Behaviors Questionnaire (SBQ) is a highly recommended free resource: https://mfr.osf.io/render?url=https://osf.io/vg2sn/?action=download%26mode=render
- Patient Health Questionnaire (PHQ-9) Modified for Adolescents (PHQ-A): ages 11-17: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwjxs_zor7zjAhVFWs0KHc9hAsAQFjAAegQIAhAC&url=https%3A%2F%2Fwww.psychiatry.org%2FFile%2520Library%2FPsychiatrists%2FPractice%2FDSM%2FAPA_DSM5_Severity-Measure-For-Depression-Child-Age-11-to-17.pdf&usg=AOvVaw35XhmW8SFxp4QR6NyDN9MA
- Center for Epidemiological Studies Depression Scale for Children (CES-DC): https://www.brightfutures.org/mentalhealth/pdf/professionals/bridges/ces_dc.pdf
- 3.125 Suicide Risk Assessment for Children and Adolescents Checklist (SRACC): A Medical Procedural Checklist and a Teaching Tool for Residency Programs, Deshpande, Swapna Journal of the American Academy of Child & Adolescent Psychiatry, Volume 61, Issue 10, S268 - S269

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OTHER RESOURCES:

- National Suicide Prevention Lifeline: https://suicidepreventionlifeline.org/
- Assessment card: SAFE-T The SAFE-T card guides clinicians through five steps, which address the patient's level of suicide risk and suggest appropriate interventions: https://store.samhsa.gov/system/files/sma09-4432.pdf https://www.sprc.org/resources-programs/suicide-assessment-five-step-evaluation-and-triage-safe-t-pocket-card
- Calm: Counseling on access to lethal means is a free online training resource for professionals on this topic: http://www.sprc.org/resources-programs/calm-counseling-access-lethal-means
- 988 Suicide and Crisis Lifeline: https://www.samhsa.gov/find-help/988

SPECIAL CONSIDERATIONS

Intellectual Disability (Early childhood–17 years)

- Intellectual Disability/Intellectual Developmental Disorder
- Global Developmental Delay (prior to age five)
- Older terminology: Mental retardation, Static encephalopathy
- Severity: Mild, Moderate, Severe, Profound

CLINICAL PEARLS

- Intellectual disability (ID) requires an individual to have deficits in both intellectual and adaptive functioning (conceptual, social, and practical domains) prior to age 18.[3]
- Behavioral issues such as aggression, property destruction, self- injurious behavior, or verbal outbursts can occur in individuals with ID. These behaviors are often the primary reason children with ID present for behavioral health treatment.
- Challenging behaviors can be driven by medical problems, behavioral health disorders, and/or response to the environment. As such, these behavioral problems warrant interdisciplinary assessment and treatment.
- Nearly all behavioral health disorders can be observed in children and adolescents with ID, with stability of diagnoses through adulthood. Diagnosis can be challenging due to limitations in ability to self-report internal experiences. Disorders often go undiagnosed and untreated.
- Assessment often relies on behavioral observation with inferences about underlying meaning. Using information about change from baseline behavior can be an effective approach.[13] Standardized rating scales used to assess and monitor behavioral conditions in children without ID (e.g. ADHD, anxiety, depression) can be helpful tools, although they often have not been validated in children with ID and warrant careful interpretation.

ASSESSMENT AND TREATMENT OF CORE SYMPTOMS IN INDIVIDUALS WITH INTELLECTUAL DISABILITY

Step 1: Confirm and classify diagnosis of ID with neuropsychological testing to assess intelligence (IQ), adaptive functioning, and system of supports for the individual.[4]

Step 2: Obtain a medical evaluation including assessment for potential causes of ID (genetics, metabolic disorders, prenatal exposures) and associated medical illnesses. Vision and hearing should be assessed. Genetic testing (e.g. chromosomal microarray) can identify congenital

syndromes with specific "neurobehavioral phenotypes" and associated medical conditions to monitor for throughout the child's development.[11]

Step 3: Early interventions should be in place including appropriate educational placement and supports (Individualized Education Program), family support, and ancillary therapies (speech, occupational, and physical therapy).

ASSESSMENT AND TREATMENT OF **CHALLENGING BEHAVIORS** IN CHILDREN WITH INTELLECTUAL DISABILITY

An interdisciplinary approach is most effective. Consider the developmental level of the individual including his or her capacity to learn problem-solving skills. Also consider biological, psychological, and social/environmental factors.[4]

Step 1: Encourage continuity of care with the same medical and behavioral health providers so the individual's baseline level of behavior and functioning is understood.

Step 2: Initial assessment of challenging behaviors involves the following steps:

- Assess and address the "ABCs" of behavior (Antecedent-Behavior-Consequence) to help understand the function of the behavior. https://www.iidc.indiana.edu/irca/articles/observing-behavior-using-a-b-c-data.html
- Some potential causes of behavioral problems can include: desire to avoid certain tasks, environmental stressors, seeking relationships, sensory needs, medical problems or underlying behavioral health disorder. Inability to communicate needs can also contribute to behavioral problems, so addressing communication skills is important.

Children with ID are at higher risk for being victims of abuse or neglect.

Any child who is suspected of being the victim of abuse or neglect should be reported to the Oklahoma Child Abuse Hotline: 800-522-3511.

Step 3: Obtain a comprehensive medical history and physical examination to rule out underlying medical causes if there is a change in behavior from baseline. Obtain appropriate labs as necessary and refer to appropriate medical specialist if needed (e.g. neurologist if concern for seizure disorder.) Common medical conditions to rule out include infections (urinary tract, ear, dental), skin concerns, constipation, seizure disorders, pain, sleep problems and medication side effects.

Step 4: If no medical condition is identified and behavior persists, consider the following:

- Referral to a speech and language therapist if language is delayed. A provider with experience in augmentive communication strategies can help provide alternative communication options for the child.

- Referral to a professional trained in therapy for behavioral management. A professional trained in applied behavioral analysis can perform a functional behavior assessment to characterize behaviors and develop a plan for management. A functional behavior assessment can also be requested by the child's school if the behavior is affecting the child's education. Other therapies studied in children without ID that may be helpful in children with intellectual disability can include, but are not limited to: cognitive-behavioral therapy or parent-child interaction therapy.

Step 5: Medications for challenging behaviors should be considered only after other potential causes have been evaluated and addressed or when behavior is severe enough to pose a safety risk. Primary care providers can treat straightforward behavioral health conditions in children with ID, such as ADHD, depression or anxiety. For more complex behavioral issues or increased comorbidity, consider referral to a specialist (such as a developmental-behavioral pediatrician, psychiatrist or psychologist) for a comprehensive behavioral health evaluation and treatment plan to diagnose and treat co-occurring behavioral health conditions. Prior to starting medications we recommend contacting the SPARK consultation line.

MEDICATION TREATMENT GUIDELINES

- Symptoms of behavioral health disorders may present differently in children with ID compared to children without ID. Some may have limitations in communication skills making it difficult to express internal states. Observation of behavioral challenges and comparison to baseline behavior is crucial along with obtaining collateral information from family and caretakers.
- A specialized manual, Diagnostic Manual-Intellectual Disability-2, can assist in diagnosing behavioral health conditions in individuals with Intellectual Disability.[5]
- Obtain appropriate informed consent with patient and/or legal guardian.
- Identify target symptoms for medication and track at regular intervals.
- Start with lowest effective dose and titrate slowly to minimize adverse side effects.
- Minimize polypharmacy to improve medication compliance and lower risk of adverse events/ medication interactions.
- Try lowering or discontinuing medication after a period of stability, at least yearly.[7]

Adrenergics: Alpha agonists such as guanfacine and clonidine have been shown to be effective for symptoms of ADHD and other challenging behaviors in children with ID and other developmental disabilities.[1, 14]

Stimulants: Stimulants have been helpful in treating inattention, hyperactivity, and impulsivity in children with ID, but response rates are lower when compared to children without ID. Children with ID are also more susceptible to side effects such as sleep problems and weight loss.[7]

Antidepressants: Antidepressant usage has limited studies to support its use in children with ID, but have been shown to be effective for depression and anxiety in children without ID. Concern for higher rates of side effects and low response rates, especially when assessing treatment of

repetitive behaviors is notable. Behavioral activation is more common in children with ID and very low dosages should be used to start.[4]

Antipsychotics: Antipsychotic medications have been shown to be effective in decreasing challenging behaviors in the short-term. Atypical antipsychotics like risperidone are the most studied in this population, but some studies have also found first generation antipsychotics such as haloperidol and chlorpromazine to be helpful. Aripiprazole and risperidone have FDA approval to treat irritability in children with autism spectrum disorder. It is important to regularly assess the potential risks and benefits of treatment, which symptoms are being treated with the medication, and document continuing need or attempt to taper off the medicine annually.[12]

Antiepileptics/Mood stabilizers: Children with ID have higher rates of seizure disorders. Some antiepileptic medications are also used to treat challenging behaviors. Though the literature is limited, valproic acid, lithium, and carbamazepine have been studied in individuals with ID and other developmental disabilities. Most of the studies supporting their use are in adults or individuals with autism.[7,8]

Sleep problems: Focus on sleep hygiene strategies. While not FDA-approved, melatonin and clonidine can be considered.[10]

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OTHER RESOURCES:

- American Association on Intellectual and Developmental Disabilities
  http://aaidd.org/
- OHCA Behavioral Health Provider Directory
  https://apps.okhca.org:456/OHCAProviderDirectory/
- OHCA Provider Directory: ABA therapists, speech/occupational therapy
  https://apps.okhca.org:456/OHCAProviderDirectory/
- Oklahoma Department of Human Services Developmental Disabilities Services (DDS)
  http://www.okdhs.org/services/dd/Pages/default.aspx
- Oklahoma Department of Rehabilitation Services
  http://okrehab.org/

- Oklahoma Family Network: Informs and connects individuals with special health care needs and disabilities, their families and professionals to services and supports in their communities. http://oklahomafamilynetwork.org/
- Oklahoma Parents Center: Parent Training and Information Center funded through the U.S. Department of Education, Office of Special Education Programs and Oklahoma State Department of Education. http://oklahomaparentscenter.org/
- Oklahoma Systems of Care: 405-248-9200. Systems of care is a comprehensive spectrum of mental health and other support services organized into coordinated networks to meet the multiple and changing needs of children, adolescents and their families with a serious emotional disturbance. https://oklahoma.gov/odmhsas/treatment/children-youth-treatment-services/systems-of-care.html
- Oklahoma University Child Study Center: Provides interdisciplinary evaluations and ongoing medical treatment for children with disabilities as well as other CME trainings for medical providers. https://www.oumedicine.com/department-of-pediatrics/department-sections/devbehav/child-study-center/
- Sooner SUCCESS: Provides resource specialists in 18 Oklahoma counties to promote a comprehensive, coordinated system of health, social and educational services for Oklahoma children and youth with special needs in their communities. https://soonersuccess.ouhsc.edu/
- TARC: Advocacy organization that works to ensure a high quality of life for individuals with developmental disabilities and their families through education, empowerment, support, and advocacy. http://www.ddadvocacy.net/

Use of Complementary and Alternative Treatments (CBD, Melatonin, and Herbal Products)

GENERAL INFORMATION

- Always ask patients and caregivers about any non-prescription products a patient may be taking. Ask specifically about over-the-counter medications, herbal and dietary supplements, and nutraceuticals.
- Evaluate medication list of prescription and non-prescription medications for drug-drug, drug-disease, and drug-food interactions that may impact care.
- Dietary supplements and herbal products are not FDA-approved and therefore are not regulated by the same rules prescription medications are, increasing chances of product strength variation.

- Many interventions lack conventional research and although many are promising, the scant literature underlines need for future research with well-powered studies of sufficient length.

SPECIFIC PRODUCTS, CATEGORIES, AND PEARLS

- Cannabis and Derivatives:
  - The cannabis plant contains many derivatives; the two most well-known are delta-9-tetrahydrocannabidiol (Δ^9-THC, or THC) and cannabidiol (CBD).[5,11]
  - CBD is most commonly formulated into oil. Ideally this oil would be purely CBD, but most report having some THC too. The maximum allowable amount of THC that can be present in CBD oil sold in the U.S. is 0.3%, or 3 mg/mL.[8]
  - THC has been linked to the development of schizophrenia and is a contributor to neurodevelopment deficits in adolescents.[3,11] There are no indications for medical marijuana for pediatric patients with mental health disorders, sleep disorders, anxiety, pain or post-traumatic stress disorder.[7]
  - We do not recommend the use of medical marijuana in pediatric patients. Both the American Academy of Child and Adolescent Psychiatry and American Academy of Pediatrics opposed marijuana legalization for both medical and recreational use because of the danger to children and adolescents with increased access, decreased perception of harm and increased marijuana use among parents and caretakers.[1,2]
  - In a sample of 84 products purchased online, less than 50% of the products had accurate amounts of CBD concentration. Also, THC was detected in 21% of the samples with concentrations as high as 6.43 mg/mL.[4] This raises concern about what concentration of CBD and THC a consumer is purchasing without oversight by the FDA.
  - Pure CBD oil has been FDA-approved for Lennox-Gastaut and Dravet syndrome in pediatric patients.[16] It is, however, not recommended to prescribe or recommend non-prescription, over-the-counter CBD oil, THC or any other cannabis-derived products for children.
- Omega-3 Fatty Acids
  - In most of the studies there is little evidence of adverse side effects or deleterious drug interaction. The International Society for Nutritional Psychiatry Research Practice Guidelines for Omega-3 Fatty Acids has recommended the following: with respect to formulation and dosage, both pure eicosatetraenoic acid (EPA) or an EPA/docosahexaenoic acid (DHA) combination of a ratio higher than 2 (EPA/DHA >2) are considered effective, and the recommended dosages should be 1–2 g of net EPA daily, from either pure EPA or an EPA/DHA (>2:1) formulation for treatment for pregnant women, children, and the elderly.[8,0]
    - **Depression:** There is significant evidence for omega-3 fatty acid supplementation, with multiple studies supporting beneficial effects in major depressive disorder.

- **Bipolar:** youth showed significantly more depression improvement with the combination of omega three fatty acids and psychoeducational psychotherapy than with placebo in a RCT.
- **ADHD:** Multiple systemic reviews conclude that omega 3 fatty acids have small beneficial effect with minimal side effects.[10]
- **Aggression, Emotional dysregulation and Disruptive behavior**:Omega 3 fatty acids have short term efficacy in reducing reactive and proactive aggression as concluded by several metanalysis.[12]
- **Autism:** In multiple randomized control trials there was trend to improve social communication and hyperactivity with greater improvement with doses of 1.5 g/day.
- **PTSD:** Omega 3 fatty acids with a higher EPA/DHA ratio given soon after injury decreased the risk of developing PTSD.[2]
- **Psychosis:** For prevention of psychosis in clinical population with high risk for psychosis, criteria for a low level of evidence are met by omega-3 fatty acids. (16,17,18,19,20,21 Reduce psychotic symptoms in children and could have a role in prevention of more significant psychosis in adolescence.[22]

- Melatonin[6]
  - Melatonin is considered a dietary supplement and is therefore not regulated by the FDA.
  - Melatonin was found safe and effective in health and children with neurodevelopmental disorders. Long-term treatment with melatonin in children was not found to affect sleep quality, puberty development, or mental health scores. Melatonin, sleep hygiene, and parent education are interventions for insomnia with the most impact with the least risk of harm in children.Long-term use of Prolonged-Release Melatonin in children with autism did not find detrimental effects on growth or pubertal development.
  - Melatonin is used for multiple indications with differing instructions. When used as a sleep inductor, recommend the patient take 1–3mg by mouth 30 minutes before bedtime. When used to regulate circadian rhythm, start with a low dose of 0.2–0.5mg fast release melatonin 3–4 hours before bedtime and increase in 0.2–0.5mg increments every week as needed.
  - Melatonin can lose its efficacy due to slow metabolism through the CYP 1A2 enzyme. If this occurs, consider decreasing the dose, therefore decreasing the serum concentration levels, until effect is seen. If ineffective, discontinue melatonin due to it suppressing endogenous production and do a trial restart after few weeks to reset the endogenous production.
- Herbal Medications
  - Herbal medications are dietary supplements and are not regulated by the FDA.
  - There is little evidence to support the use of herbal medications in pediatric patients. It is important for clinicians to ask patients about herbal medications.

- If the physician, pharmacist and patient agree that an herbal medication should be tried, only use herbal products that have been verified by the United States Pharmacopoeia (USP). The USP initiated a voluntary dietary supplement verification program that provides consumers with products that have met regulatory standards for purity, accuracy of ingredient labels and good manufacturing practices.[17] A list of these herbal products can be found at:
  https://www.usp.org/dietary-supplements/reference-standards
- Information about herbal products can be found at Natural Medicines Comprehensive Database, Consumer Version:
  http://naturaldatabaseconsumer.therapeuticresearch.com/home.aspx?cs=&s=NDC

- L-Methylfolate
  - L-Methylfolate is a dietary supplement not regulated by the FDA. This supplement is thought to assist in patients with errors of folate metabolism who may be more vulnerable to oxidative stress.[15]
  - L-Methylfolate is thought to augment treatment of major depressive disorder in adults with partial or no response to selective serotonin reuptake inhibitors.[12] There have been a small number of positive studies to support l-methylfolate in pediatric patients with treatment-resistant depression.[9,13]
  - If L-Methylfolate is started in a pediatric patient, initiate at 7.5mg by mouth daily and increase to 15mg by mouth daily maximum.
  - Psychosis: Effectiveness of folic acid/methyl-folate/folinic-acid (FA) add-on to APs in improving negative symptoms is supported by a small-study metanalysis.[24]
  - Adverse effects seen in pediatric studies include impaired sleep and increased anxiety, although the frequency of these effects is low.[13]

- NAC
  - Doses studied in child population are 600 mg/day to 3600 mg/day. Use with caution in kidney disease. Otherwise, mild side effects of constipation and fatigue.
    - Substance abuse Disorders In multiple RCTs, N-acetylcysteine is more effective than placebo in reducing substance cravings, which can likely prevent relapse or even promote abstinence.
    - Anxiety and OCD - Citalopram + NAC upto 2400 mg/day had significantly greater decrease in YBOCS score than Citalopram + placebo (Cohen's d = 0.83)[4]
    - Psychosis In first episode psychosis (FEP) augmentation with NAC shows statistically significant improvements in negative symptoms. The significant improvement in negative symptoms in youth with FEP (supported only by two small RCTs) and in social cognition (supported by one RCT) are important for reducing disability.[23, 25,26,27,28]

        - Autism Promising results for irritability, hyperactivity, and repetitive behavior, esp. as adjunct to Risperidone. Therapeutic dosage 1800-2400 mg for 12 weeks.[14]

- Exercise
    - Anxiety Metanalysis indicates that interventions that lasted 10 or more weeks with 20-45 min/ session were more effective with small effect size for anxiety and small to moderate for generalized stress.[1]
    - Mood Systematic review with large sample of over 200 youth demonstrated moderate effect on depression.[9]
    - ADHD Multiple metanalyses support its use for reducing core ADHD symptoms, improving executive functioning with moderate to vigorous being most beneficial.[11]
    - Psychosis For prevention of psychosis in clinical population with high risk for psychosis, criteria for a low level of evidence are met by exercise.[15]
    - Insomnia Physical activity significantly improved sleep efficiency, sleep onset latency and waking after sleep onset.[13]
- Biofeedback
    - Anxiety Biofeedback can be helpful for anxiety as per a systematic review of 13 studies although there was high heterogenicity in study populations.[3]
    - ADHD

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Treating LGBTQ+ Youth

LGBTQ+ is an acronym that stands for Lesbian, Gay, Bisexual, Transgender, and Queer (Q may also stand for questioning). The "+" is added to recognize a number of other sexual orientations and gender identities that are represented within the community.

TIPS FOR CREATING A WELCOMING PRACTICE

Creating a Safe Space

- Acknowledge LGBTQ+ youth in the physical space of your practice. Place a rainbow flag or an LGBTQ+ safe space sticker/sign on the door to your office to let diverse youth know that they will be welcomed.
- Stay informed about LGBTQ+ issues. We recommend several advocacy and education groups below. Advocate for these issues in your communities when applicable.
- Consider adding LGBTQ+ reading material in the waiting room. Having a diverse selection of entertainment will help the patient grow more confident and feel welcomed in your space.
- Ask your patients about their preferred name and pronouns. Some youths may wish you to use a single pronoun or several pronouns interchangeably.
    - Some of these pronouns may be new to you and it may take time to get accustomed to using them. If you mistakenly use the wrong pronoun, simply correct yourself and move on.

Common Personal Pronouns	Neopronouns	Combinations
she/her	it/its	he/they
he/him	ze/zir	she/they
they/them	per/pers	he/she/they

Special Considerations

- Be mindful of referrals. Make sure the practitioner you refer the youth to is LGBTQ+ affirming.
- Be mindful of parent involvement in treatment. Carefully consider whether parental involvement will be helpful or harmful. Telling a patient's parents about their sexual orientation without permission may be unsafe. Always check in with youths to determine if they are out and to whom.
- Be mindful of safety. If there are concerns about safety for youths in unaccepting situations, assist the youth in creating a safety plan. Focus on identifying safe places if physical safety or housing is compromised.

- If youths are considering coming out to family, assist them in weighing this decision and provide anticipatory guidance when needed.
    - Help the youth weigh the risks and benefits of disclosure.
    - Explore motivations for disclosure.
    - Explore relationships with parents, cultural/ethnic background, and religious background.
    - Encourage youth to consider how their family may react and how they might deal with a negative reaction. Example questions:
        - How do your parents/friends/family feel about the LGBTQ+ community? How would they feel if you told them you were a part of the community?
        - How would you respond if someone made a negative comment about the LGBTQ+ community directed at you?
    - Be prepared to support the youth and their family. Provide resources if needed.

RESOURCES FOR LGBTQ+ YOUTH & THEIR FAMILIES

Hotlines

- Trans Lifeline
    - Crisis hotline for members of the transgender community
    - translifeline.org
- The Trevor Project
    - Crisis hotline and chat service for LGBTQ+ youth
    - thetrevorproject.org

Community Spaces

- QChatSpace
    - Online moderated chat for LGBTQ+ and questioning teens
    - qchatspace.org
- TrevorSpace
    - Online moderated chat community for LGBTQ+ youth
    - thetrevorproject.org/visit-trevorspace/
- Gender and Sexualities Alliances Network

- Student organizations for LGBTQ+ and allied youth
- gsanetwork.org

- CenterLink
  - Directory of LGBT+ community centers across the U.S.
  - lgbtcenters.org

Health Directories

- PrEP Locator
  - Directory of U.S. providers of HIV Pre-Exposure Prophylaxis
  - preplocator.org
- LGBTQ+ Healthcare Directory
  - Directory of U.S. and Canada-based LGBTQ+ knowledgeable providers
  - lgbtqhealthcaredirectory.org

Family Resources

- Family Acceptance Project
  - Resources for families and parents of LGBTQ+ youth
  - familyproject.sfsu.edu
- Parents and Friends of Lesbians and Gays (PFLAG)
  - An organization dedicated to supporting LGBTQ+ persons and their families
  - pflag.org
- Strong Families Alliance
  - Provides accurate information to parents and encourages parents to lead with love with their LGBTQ+ youth
  - strongfamilyalliance.org

General Resources

- Amaze
  - Age-appropriate and LGBTQ+-affi rming information about puberty, relationships, and sexual health
  - amaze.org

- National Center for Transgender Equality
    - Educational Resources surrounding legal protections for transgender persons in the U.S.
    - transequality.org
- Human Rights Campaign
    - LGBTQ+ advocacy group that provides a variety of resources that cover a range of LGBTQ+ topics
    - hrc.org/resources
- Trans Student Educational Resources
    - Youth-led organization dedicated to transforming the educational environment for trans and gender non-conforming youth
    - transstudent.org
- Gay, Lesbian and Straight Education Network (GLSEN)
    - Network of educators, students, and local chapters aimed to promote inclusion in K-12 educational settings
    - glsen.org
- It Gets Better Project
    - LGBTQ+ stories of resilience and coming out
    - itgetsbetter.org
- Freedom Oklahoma
    - Oklahoma-based 2SLGBT+ (Two Spirit, Lesbian, Gay, Bisexual, Transgender, +) advocacy group that promotes inclusion across Oklahoma and the 39 sovereign tribal nations.
    - freedomoklahoma.org

RESOURCES FOR CLINICIANS

Educational Resources

- National LGBTQIA+ Health Education Center
    - Educational resources for health providers which cover a variety of LGBTQ+ health topics
    - lgbtqiahealtheducation.org

- Center of Excellence on LGBTQ+ Behavioral Health Equity
    - Provides behavioral healthcare practitioners with vital information on supporting LGBTQ+ individuals
    - lgbtqequity.org
- Moving Beyond Change Efforts Evidence and Action to Support and Affi rm LGBTQI+ Youth
    - Substance Abuse and Mental Health Services Administration (SAMHSA) report which provides practitioners with accurate information about which therapeutic practices are eff ective and appropriate to use with LGBTQ+ youth (SAMHSA)
    - https://library.samhsa.gov/product/moving-beyond-change-efforts-evidence-and-action-support-and-affirm-lgbtqi-youth/pep22-03-12-001

Professional Resources

- Gay and Lesbian Medical Association
    - A national organization intended to promote health equity for LGBTQ+ communities
    - glma.org
- World Professional Association for Transgender Health
    - An international organization focused on transgender health
    - wpath.org
- Association of Gay and Lesbian Psychiatrists
    - Organization of psychiatrists which advocates on LGBTQ+ mental health issues
    - aglp.org
- Pride CAPA
    - Non-profi t organization dedicated to the mental health needs of LGBTQ+ youth
    - pridecapa.org

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Trauma-Informed Care

PRINCIPLES OF A TRAUMA-INFORMED APPROACH

Substance Abuse and Mental Health Services Administration's Principles of a Trauma-Informed Approach

- **Create a Sense of Safety:** The physical setting of practice should promote a sense of physical and psychological safety in patients and their families.
- **Display Trustworthiness & Transparency:** Operations and decisions should be made transparently to promote a sense of trust within patients and their families.
- **Promote Peer Support:** The practice should leverage peer support to enhance that patient's hope, safety, trust, collaboration, healing, and recovery. In the case of trauma-exposed children, this can include family members or caregivers who have experienced traumatic events.
- **Collaboration and Mutuality:** Power differentials are recognized and the practice promotes the sharing of power and decision-making. Practices must recognize that everyone plays a role in trauma-informed care.
- **Empowerment, Voice, and Choice:** Throughout treatment, a strong focus should be placed on building upon the patient's strengths and experiences. Clients are included in shared decision-making for developing treatment plans and goals.
- **Cultural, Historical, and Gender Issues:** The practice offers access to culturally responsive services, leverages traditional cultural connections, and implements policies that are responsive to the cultural needs of the population being served.

TRAUMA-INFORMED CARE CONTINUUM

Below is a continuum demonstrating the various levels of trauma-informed care. Consider your organization or practice and determine where it may be placed on the continuum.

- **Trauma Destructiveness:** Attitudes, policies, and practices are actively harmful to children who have faced traumatic experiences. In these practices, trauma who have experienced trauma are dehumanized with policies being intended to control and put children "in their place" rather than help.

- **Trauma Incapacity:** These practices are not actively trauma-destructive but there is no infrastructure or practice culture in place to help trauma-exposed children. When trauma is addressed it is often seen as an "excuse" for negative behaviors. Externalizing symptoms may be viewed as a way to sabotage treatment.
- **Trauma Blindness:** These practices are well-intentioned and attempt to provide good therapy but they do not recognize that trauma can be both an independent factor and/or a contributing factor to psychopathology. Children may still be blamed for disruptive behaviors.
- **Trauma Pre-Competence:** There is a significant understanding surrounding trauma in children and there is a desire to treat it. Efforts have begun but may be limited and false senses of failure or accomplishment may prevent further movement on the spectrum.
- **Basic Trauma Competence:** Practice demonstrates a signifi cant commitment to trauma-informed care but eff orts are ongoing. Children and families are involved in care and decision-making and they receive education about the role of trauma in their child's development.
- **Advanced Trauma Competency or Trauma Proficiency:** Trauma-informed care is consistently implemented and continually improved. Knowledge is continuously expanded, trauma specialists are present, new programs are evaluated, and program leaders seek to be advocates of trauma-informed care.

TIPS FOR CREATING A TRAUMA-INFORMED PRACTICE

Modifying the Space

- **Review all aspects of the space:** Modify when needed to improve patient experiences. Consider the noise level, lighting, comfortability of seating, temperature, the availability of linguistically/culturally appropriate materials, child safety, and availability of child-friendly books/toys / artwork.
- **Consider aspects of the space that you cannot control:** This may include a heightened security presence. Let families know about any physical space concerns that may contribute to heightened stress in patients and their families.
- **Place photos of pediatric practitioners and staff in public spaces:** Having photos of staff & practitioners will ensure that patients and their families are familiar with the person(s) they will be interacting with. (practice website, waiting room, etc.)
- **Have linguistically and culturally appropriate resources available for diverse families:** This can include community or mental health resources.
- **Ensure that practitioners and staff are kind and polite to everyone.** Both in person and over the phone.

- **Ensure that families are greeted sincerely.** Ask about preferred names and pronouns and make sure to acknowledge everyone in attendance.

During Treatment

- **Practice mindfulness.** Your own stress levels may have a significant impact on your interaction with patients and their families. Make sure you are in the moment and can interact with patients warmly and productively.
- **Be aware of your body language during treatment.** Always try to smile, avoid standing over patients (consider getting down to their level), and avoid appearing rushed. Consider any relevant cultural practices related to interpersonal interactions.
- **Try to recognize all indications of discomfort.** These signs may look different for different families, especially for those coming from diverse backgrounds.
- **Take care to clearly explain any measures used.** Clearly explain the measures: use, purpose, and what will be done with the scores after. Check in frequently to determine understanding and give plenty of opportunities for families to ask questions.
- **When asking sensitive questions, be sure to explain your reasoning and listen to concerns.** Ensure that these questions are asked in a private setting where families can feel comfortable and secure and can answer questions openly.
- **Take time to fully explain examinations before and after the exam.** Be sure to check for understanding periodically.
- **Ask open-ended questions.** This shows families that you are willing to fully explore root causes with them.
- **Personalize treatment to families' strengths and needs.**
- **Collaborate with families to develop solutions.** Ask for clarification from families often so solutions are well tailored to their needs.
- **Ensure strong continuity of care.** Building strong rapport with a team of practitioners can help build trust.
- **Engage in collaborative work.** Including practitioners of various levels can promote a mutually respectful environment.
- **Seek out continuing education opportunities.** Seek out training to increase your knowledge base on trauma-informed treatments and practices.

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