

Youth Sports Specialization and the Potential Impact on Emotional, Behavioral Health

Assessing for Behavioral Health Disorders in Student
Athletes

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Objectives

Understanding	Understanding the main criteria for Sports Specialization in Youth and the main physical health and psychological effects associated with high intensity Sports Specialization.
Identifying	Identifying emotional, behavioral signs and symptoms in young athletes.
Developing a Competency	Developing a working knowledge of the different aspects of behavioral health treatment which are used to effectively address the emotional, behavioral symptoms in student athletes.

State of Youth Sports in the United States

- ▶ 60 Million youth participate in organized athletics
- ▶ 8 million participate in High School Interscholastic Sports
- ▶ 50 % of youth who participate in High School Sports participate in club sports in addition to their school-based teams, training year round.
- ▶ Prevalence rates of sport specialization in youth athletes ranges anywhere between 17% and 41 %
 - ▶ Variable factors include: athlete sex, age, sport, SES, school size, and geographic location.

Youth Sports Specialization

- ▶ The Three Main Criteria Defining Youth Sports Specialization:
 - ▶ 1. Choosing one main sport to focus on
 - ▶ 2. Stop participating in all other sports
 - ▶ 3. Year round training in the specific sport of choice (More than 8 months a year)

AGE (years/months)

6

7

8

9

GENDER

BOYS 6.8



GIRLS 7.4

**RACE/
ETHNICITY**

CAUCASIAN 6.6



HISPANIC 8.2

AFRICAN AMERICAN 7.7

**PARENT MARITAL
STATUS**

MARRIED 6.8



SINGLE/NEVER MARRIED 8.8

**CHILD EXERCISE
FREQUENCY**

DAILY 6.8



ONCE A WEEK 8.9

**HOUSEHOLD
INCOME**

\$100K 6.3



\$35K 8.1

Money is the biggest driver of early participation.

BASKETBALL



2008
2013

5.7 M
5.5 M

-3.9%

SOCCER



5.6 M
5.0 M

-10.7%

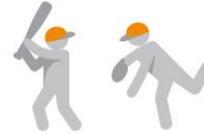
TRACK & FIELD



847 K
731 K

-13.7%

BASEBALL



5.3 M
4.5 M

-14.4%

FOOTBALL



1.8 M
1.3 M

-28.6%

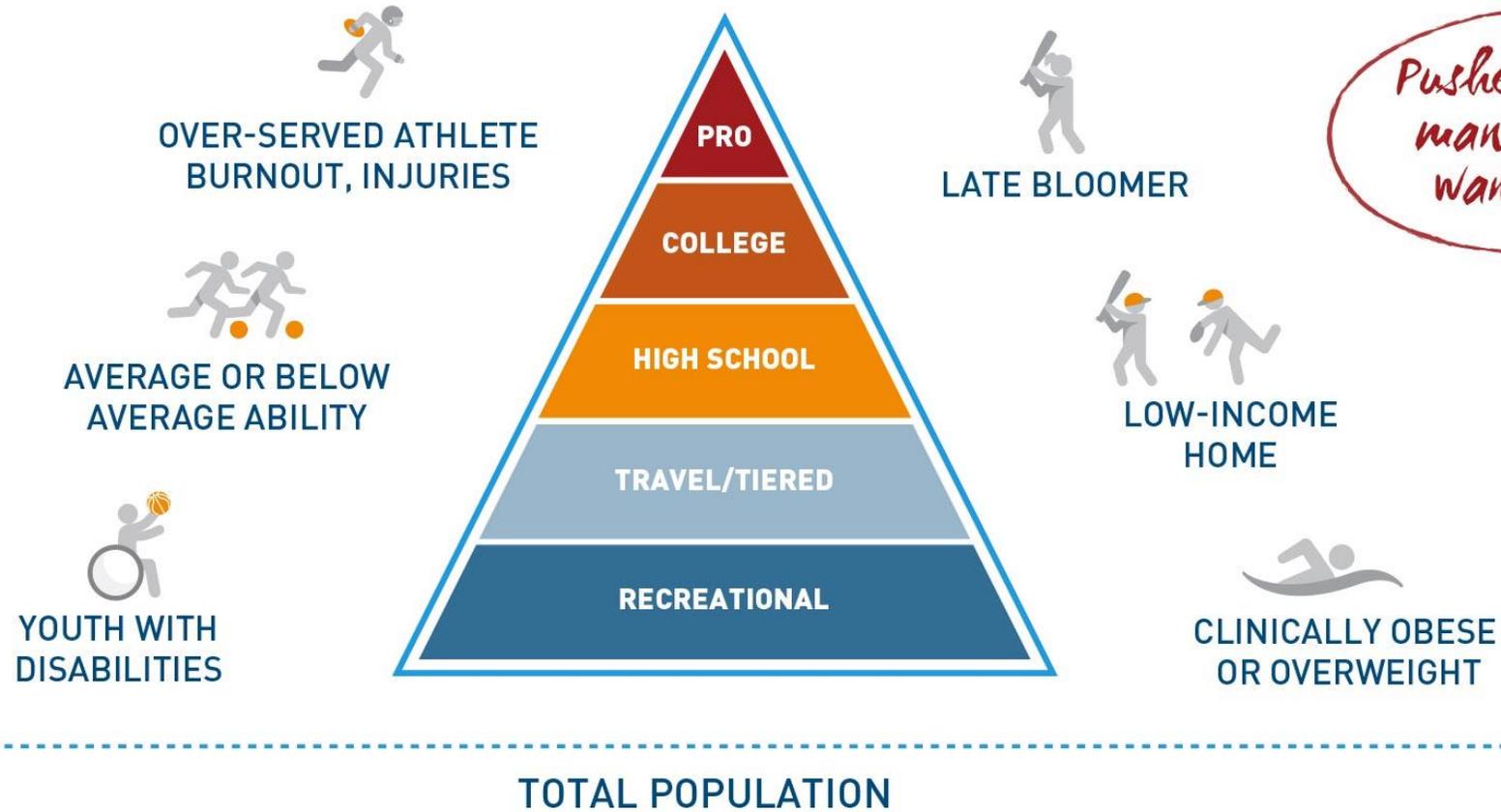
SOFTBALL



1.3 M
862 K

-31.3%

2.6M fewer kids playing these sports alone in past 5 years.



Pushed aside are many kids who want to play.

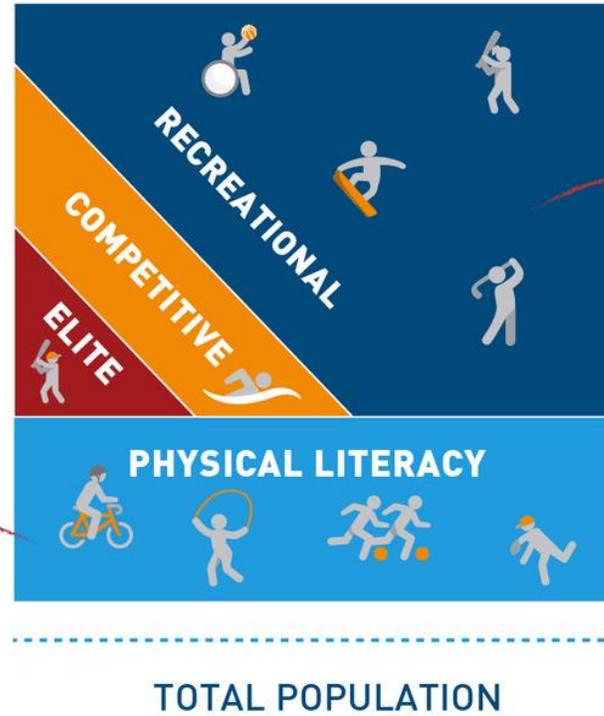
Why is This an Important Issue

Burnout which can be associated with emotional and behavioral health conditions



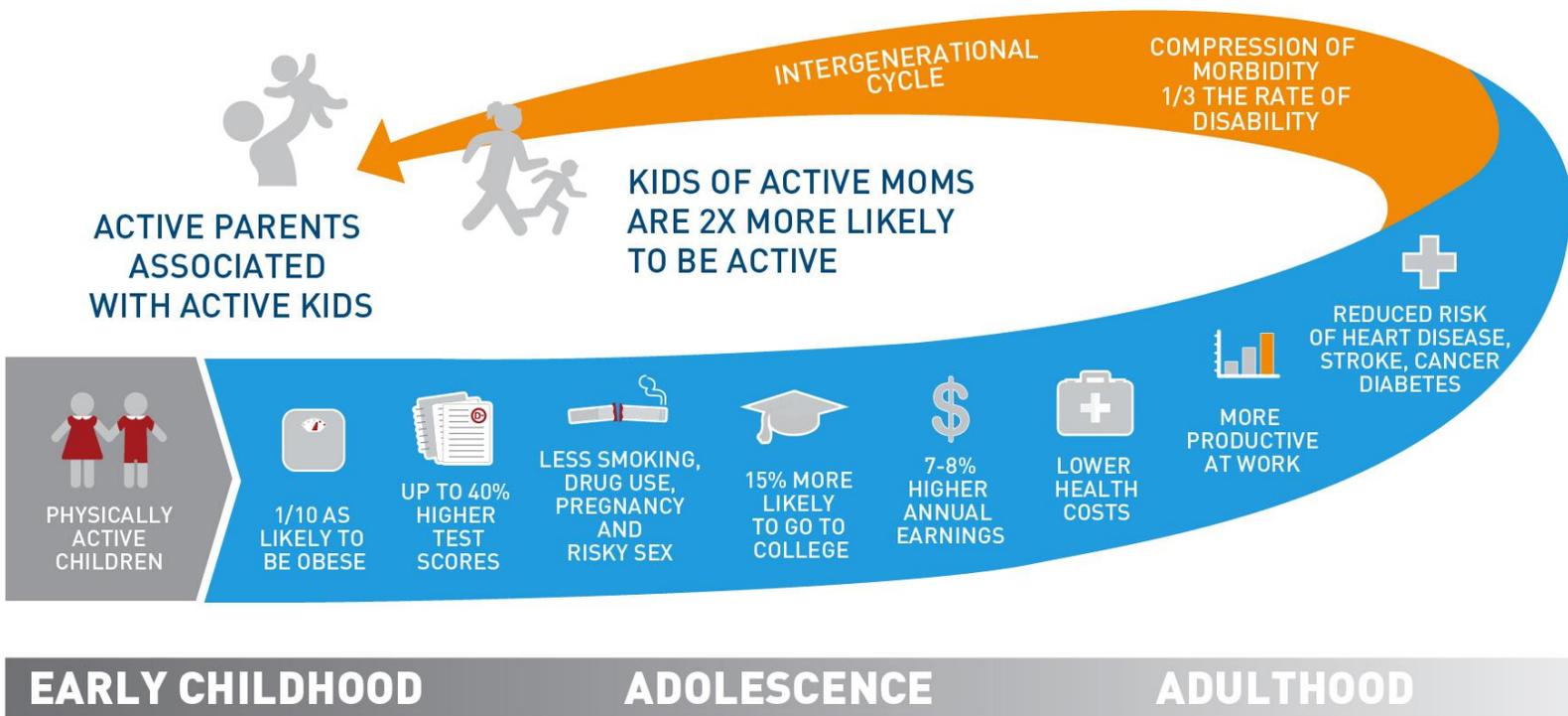
Injury Risk makes these young athletes extremely vulnerable to emotional and behavioral health conditions.

Up to age 12, focus on ability, confidence, and desire to be active.



Squaring the pyramid creates athletes for life, at all levels.

The Proposed Solution



The Model

Emotional, Behavioral Health Review of Signs and Symptoms

- ▶ National Comorbidity Survey- Adolescent Supplement -2010
- ▶ National Survey of youth between ages 13 and 18
- ▶ Goal was to look at the lifetime prevalence of the major classes of mental health disorders across a national sample of youth
- ▶ Results:
- ▶ 1 in every 4 to 5 youth meet criteria mental health disorder with severe impairment across their lifetime.
- ▶ Anxiety Disorders (31.9%) > Behavior Disorders (19.1 %) > Mood Disorders (14.3%) > Substance Use Disorders (11.4 %)
- ▶ 40 % of youth met criteria for more than one class of Mental Health Disorder

Anxiety Disorders

Anxiety Disorders in Athletes



- ▶ Similar to the general population, a study of Australian Athletes based on self-report of anxiety symptoms:
 - ▶ 14.7 % met criteria for Social Anxiety Disorder
 - ▶ 7.1 % met criteria for Generalized Anxiety Disorder
 - ▶ 4.5 % met criteria for Panic Disorder

Anxiety and the Athlete



Anxiety, if left unaddressed, can lead to more serious mental health disorders.



Given the potentially critical impact of anxiety in sport performance, it is critical to ensure it is addressed early by trained mental health professionals.

Impact of Anxiety on Sports Injury

Anxiety-related stressors can directly influence the physical and psychosocial aspects of the rehabilitation process and the eventual successful return to sport participation.

Assessing Anxiety Symptoms



ONSET OF SYMPTOMS



PRECIPITATING FACTORS/
ALLEVIATING FACTORS



CURRENT STATUS

Anxiety Management and the Athlete



▶ Cognitive Behavioral Therapy

- ▶ Interventions that aim to provide athletes an ability to manage their unrealistic or irrational thoughts, debilitating emotional responses, and nonbeneficial or maladaptive behaviors or physiological symptoms, can help with healthy and effective management of anxiety symptoms.
- ▶ Pharmacologic management of anxiety symptoms for moderate to severe anxiety symptoms could consist of a conservative trial of **SSRI medication** such as Fluoxetine or Escitalopram.
- ▶ Medications such as **beta blockers** and **benzodiazepenes** are avoided because of their potential negative impact on sport performance.

Behavioral Disorders and the Athlete

In student athletes and student athletes the ADHD prevalence rate is approximately 7 to 8 %.

Athletes with ADHD are commonly drawn to sports because of the natural inclination to physical activity and quick impulses.

ADHD and the Athlete

- ▶ Although Athletes with ADHD are commonly drawn to sports because of the natural inclination to physical activity and quick impulses which can enhance performance in sport:
- ▶ The behavioral symptoms of **inattentiveness** and **impulsivity** can also impede sport performance.
- ▶ Other potential negative effects associated with ADHD:
 - ▶ Lower frustration tolerance
 - ▶ Higher concussion risk and higher risk of post-concussive syndrome.

Assessment of Attention Deficit Hyperactivity Disorder

Onset of symptoms

Confirmation of
symptom impact
across multiple
settings

Current impact on
daily functioning

ADHD Management in the Athlete



- ▶ Psychosocial interventions should be the foundation of treatment:
 - ▶ Problem solving skills training/ Psychotherapeutic supports
 - ▶ Educational supports through 504 plan and IEP services
- ▶ Pharmacologic management of moderate to severe ADHD symptoms.
 - ▶ Psychostimulant medications- closely regulated by regulatory authorities.
 - ▶ Nonstimulant medications- Atomoxetine, Bupropion.

Mood Disorders

Depression and the Athlete

- ▶ Participation in individual and team sports may even be protective against development of depressive symptoms.
 - ▶ Emotional benefits of exercise include potentially helping self esteem and adding to a sense of accomplishment.
 - ▶ Team sports even more so than individual sports
- ▶ Risk Factors for **Depression** in the young athlete:
 - ▶ Family history of depression
 - ▶ Psychosocial stressors associated with depression such as social isolation, interpersonal conflicts
 - ▶ Injury
 - ▶ Competitive failure
 - ▶ Retirement from sport
 - ▶ Overtraining Syndrome
 - ▶ Complex overlap with fatigue being a common symptoms in both conditions,
 - ▶ Concussion

Adolescent Depression



+ Difference between this estimate and the 2018 estimate is statistically significant at the .05 level.

Bipolar Disorder and the Athlete

- ▶ Onset in late adolescence and young adulthood coincides with potential peak ages of sports performance
- ▶ One of the key treatment factors also involves ruling out potential substance induced Bipolar symptoms;
 - ▶ Anabolic- Androgenic Steroid Use can often precipitate hypomanic, manic, and even psychotic-like symptoms;
 - ▶ Usually seen at high doses and when multiple substances are taken “stacking”
 - ▶ Mood symptoms are usually subsyndromal.
 - ▶ Other ergogenic agents such as psychostimulants used to treat ADHD could be also associated with manic or hypomanic symptoms, or even psychotic symptoms
- ▶ The excessive energy associated with manic symptoms could potentially manifest as excessive physical training and exercise, resulting in a delay of diagnosis

Major Depressive Disorder

- ▶ Signs and symptoms-
 - ▶ Sleep Disturbance
 - ▶ Interest, Loss of/ Anhedonia
 - ▶ Guilty thinking and hopelessness
 - ▶ Energy, lack there of
 - ▶ Concentration difficulties
 - ▶ Appetite changes
 - ▶ Psychomotor slowing or agitation
 - ▶ Suicidal ideation
- ▶ Onset
- ▶ Episodic versus Chronic
- ▶ Current status

Bipolar Disorder

- ▶ Episodic changes in mood with associated symptoms of:
 - ▶ **Grandiosity**
 - ▶ **Racing Thoughts**
 - ▶ **Activity-** Increased, Goal-Directed, Injudicious
 - ▶ **Pressured Speech**
 - ▶ **Elated Mood**
 - ▶ **Sleep-** Decreased Need for Sleep
- ▶ Onset
- ▶ Episodic versus Chronic
- ▶ Current status

Management of Mood Disorders in Athletes



- ▶ **Pharmacologic management:**
 - ▶ Pharmacologic management for Depressive symptoms
 - ▶ SSRI and SNRI antidepressants,
 - ▶ Pharmacologic management for Bipolar symptoms
 - ▶ Lithium- close monitoring of therapeutic window
 - ▶ SGAs- Lurasidone, Ziprasidone, Aripiprazole
 - ▶ Lamictal
- ▶ **Cognitive Behavioral Therapy**
 - ▶ Interventions that aim to provide athletes an ability to manage cognitive distortions and develop healthy and adaptive coping skills for managing mood symptoms.
- ▶ **Psychoeducation**
- ▶ **Family Therapy and Support**



Substance Use Disorders

Substance Use and the Athlete

- ▶ In General, elite athletes use substances at lower rates than the general population, but the five most commonly-used and misused substances by elite athletes are: **alcohol, cannabis, nicotine, prescribed opioids, and stimulants.**
- ▶ Potential reasons why an athlete may use substances include:
 - ▶ 1. Socialization purposes
 - ▶ 2. Stress relief either before or after competition
 - ▶ 3. Manage or reduce acute or chronic pain related to training or competition
 - ▶ 4. Improve self confidence in the context of important competitions or games
 - ▶ 5. Optimize performance and endurance in the context of training and competition.

Assessment of Substance Use Disorders



- ▶ Age when use started
- ▶ First Drug Used
- ▶ Use Pattern
- ▶ Current Use
- ▶ Legal charges and Functional impairment related to substance use
- ▶ History of Withdrawal Symptoms- Review what substances are potentially associated with a life-threatening withdrawal (alcohol and sedative/hypnotics)
- ▶ History of Overdose and Medical Complications related to Substance use

Management of Substance Use Disorders in the Athlete

- ▶ A treatment model to consider:
 - ▶ Full Time Mental Health/ Substance Use Treatment Provider that monitors for SU on an ongoing basis.
 - ▶ Screening which starts preseason and continues through the season with frequent testing.
 - ▶ Follow-up evaluations and medication-assisted treatment for those who screen positive.
 - ▶ Brief, targeted individual and group interventions, utilizing motivational interviewing strategies.
 - ▶ Medical Withdrawal management is clinically indicated for withdrawal syndromes associated with alcohol, sedative/hypnotics, and opiates.

Intervention Steps

- ▶ Assess whether the indicated intervention is:

A- Routine / Non-urgent

B- Urgent

C- Imminent / Emergent

A. Routine/Non-Urgent:

Community based outpatient
behavioral health referrals

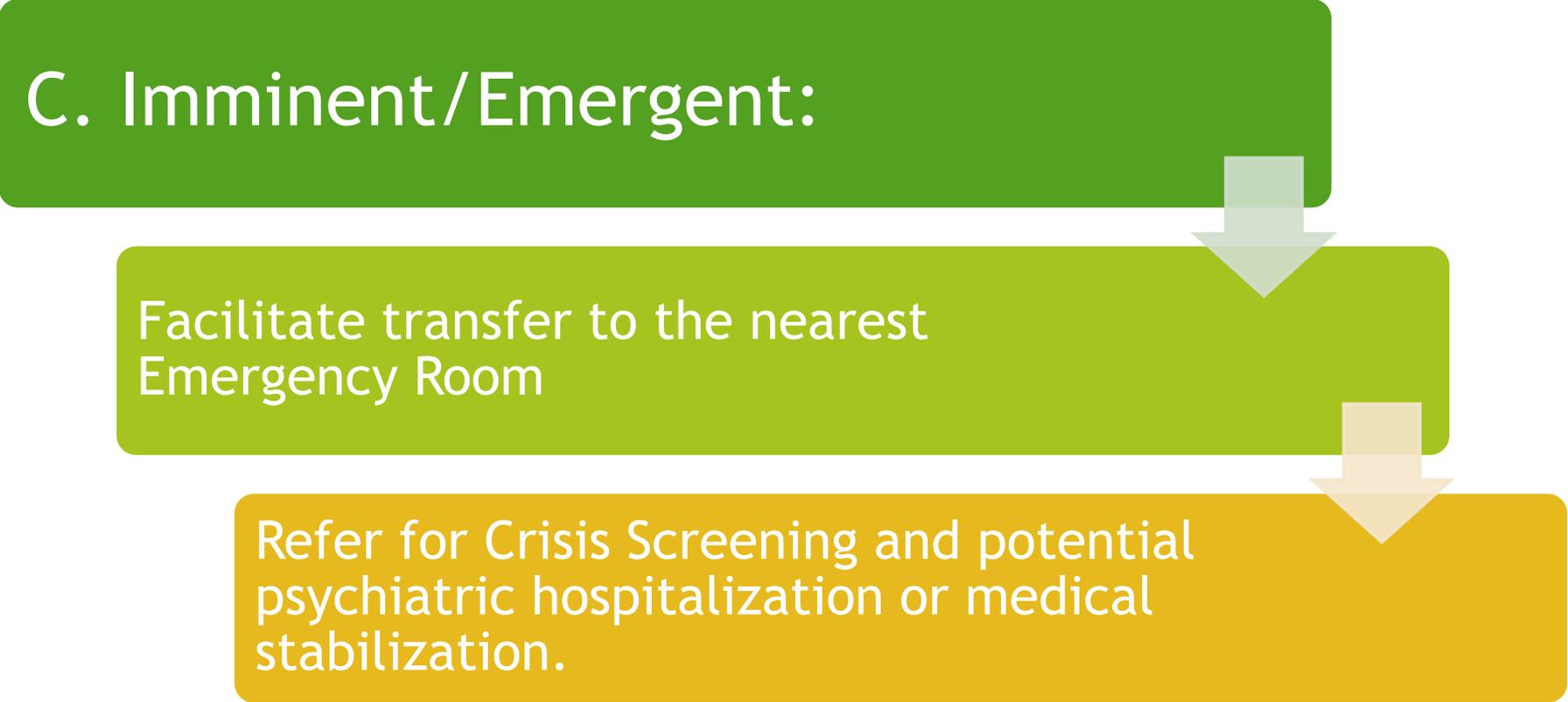
Non-clinical community-based
resources and supports

B. Urgent:

Mobile Crisis- Referral for community-based crisis stabilization services

Urgent Care for Behavioral Health- Referral to a Partial Hospitalization Program or an Intensive Outpatient Program

C. Imminent/Emergent:



Facilitate transfer to the nearest
Emergency Room

Refer for Crisis Screening and potential
psychiatric hospitalization or medical
stabilization.

Evidenced Based Best Practices



**ANXIETY DISORDERS -
COGNITIVE BEHAVIORAL
THERAPY**



**BEHAVIORAL DISORDERS -
PROBLEM SOLVING SKILLS,
PARENT BEHAVIORAL
MANAGEMENT TRAINING**



**MOOD DISORDERS -
COGNITIVE BEHAVIORAL
THERAPY, INTERPERSONAL
PSYCHOTHERAPY**



**SUBSTANCE USE DISORDERS -
FAMILY BASED
PSYCHOTHERAPY**

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