Understanding and Meeting the Needs of Children and Adolescents at High Risk

Foundations of a Model

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Table of Contents

Authors	3
Introduction	4
SECTION I: A Focus on Child and Adolescent Development	6
Children and adolescents at high risk: Important characteristics and critical issues	7
Children exposed to maltreatment and/or trauma	9
Children involved in child welfare systems	12
Children with parents who have mental health/substance use disorders (SUDs)	13
Children with absent/incarcerated parents	14
Children with disruptive behaviors, impulse control issues and conduct disorders	15
Children with anxiety and/or depression	16
Children with substance use disorder(s) (SUDs)	20
Children with multiple disorders (including intellectual and developmental disorders [IDDs])	22
SECTION II: Foundations of a Comprehensive Community Healthcare System Serving Youth	25
Screening and assessment	26
Child and adolescent interventions and treatments	28
Evidence-informed psychosocial treatments	28
Psychopharmacological treatment oversight and monitoring	34
Family-driven, youth-guided components of care	36
Culturally competent and trauma-informed approaches to care	38
Crisis planning and intervention	40
Monitoring clinical, social and adaptive outcomes	42
Conclusion	43
References	45



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Introduction

Magellan Healthcare (Magellan) stands on a reputation as an innovator in the care and coordination of children and adolescents who require behavioral health services. We believe a prevention focus must concentrate on a child's long-term growth and development trajectory and meet the challenge posed by the National Research Council and Institute of Medicine (NRC/IOM) Committee on the Prevention of Mental Disorders and Substance Abuse Among Children, Youth and Young Adults. Specifically, "What will benefit the child five, ten or more years from now?" (p.17).[1] Our goal is to prevent and treat problematic behaviors and varying levels of mental illness, as well as to promote positive mental health, in young people.

Promoting the value of emotional well-being and a high level of psychosocial functioning, our staff and providers assist young people and their families in realizing their strengths, meeting their challenges and enjoying a spirit of hope to develop skills for resiliency and optimal recovery. Our system-of-care (SOC) approach addresses each individual's unique needs, helping them to reach their potential to successfully live at home, achieve in school, participate in their communities and enter adulthood.

Magellan ensures that all children receive proper screening at the health plan and practice levels using face-to-face evaluations and nationally recognized standardized instruments to determine behavioral healthcare needs, physical healthcare needs and developmental milestones. These evaluations and instruments are also used to measure the effects of trauma. Core components of the screening and planning process include crisis identification, planning and intervention. At intake, functional assessment includes an evaluation of protective factors. Throughout the treatment process, Magellan considers participation by youth and their families as key to ensuring youth and family voice, choice and active participation.

Magellan identifies and prioritizes evidence-based practices (EBP) in the following areas:

- Trauma-informed care
- Whole health
- Psychopharmacology
- Foster care provider training
- Primary care physician education and training
- Minority-related EBP
- Proactive risk assessment
- Suicide assessment and treatment
- Management of aggression without restraint and seclusion
- Family as a system
- Assessment and screening of protective factors for children in foster care



Other services include:

- Parent support and training to ensure engagement and active participation of the youth and family in the treatment process
- Crisis prevention and trauma awareness for parents, foster care providers, agencies and others who have a significant relationship with the individual

We are committed to demonstrating to all stakeholders how we use measurement to drive care and accountability. Based on efforts in the field of child behavioral healthcare, measures include elements most important to drive positive outcomes for children and the system. Categories include the following, and sources of data include primary care provider and specialist screening results, provider observation and claims:

- National and functional outcomes
- Clinical, developmental and functional measures
- Consumer experience and accountability measures
- Care coordination measures

Combining a preventive approach with a developmentally informed philosophy allows the children, youth and families under our care to achieve maximum outcome improvement. This improvement is measured continuously and illustrates the effectiveness of our approach. We outline the basis of our model throughout this document.



SECTION I: A Focus on Child and Adolescent Development

Social, community and clinical programs designed to be developmentally informed have historically been considered the optimal standard in serving the population of young people with Mental, Emotional and Behavioral (MEB) disorders. Magellan acknowledges that research exists to understand the impact of critical and sensitive periods in brain development on motor and sensory functions, and is keenly aware of a recent research focus on the impact of environmental and experiential factors during these same periods on the development of MEB disorders in young people. Therefore, emphasis must be on vulnerabilities or potential developmental disruptions involving:

- 1. Learning and memory
- 2. Attachment
- 3. Social relatedness
- 4. Self-regulatory control

These underlie cognitive and social competence and can affect the achievement of developmental milestones. Magellan stresses the criticality of enhancing young people's ability to achieve developmental competence along with a positive sense of self-esteem, well-being, social inclusion and a strengthened ability to cope with adversity. [1][2][3]

Magellan emphasizes patient risk and protective/strength factors in planning treatment and delineating patient outcomes. [1][4] These factors are manifest from preconception through adolescence and appear in the individual as well as in the context of family, school and peers, and the neighborhood and community. By applying this construct, Magellan organizes service systems that strategically design and target interventions based on the child's specific developmental stage and unique risk/protective factors by: (p.90)[1]

- Altering the experience of the risk factor, e.g., by developing coping strategies
- Altering the exposure to the risk factor, e.g., monitoring child involvement with antisocial peers
- Averting negative chain reactions, e.g., ameliorating harsh parenting, which leads to child oppositional behavior and increased conflict
- Strengthening protective factors, e.g., building self-esteem, athletic ability, academic strength
- Providing for turning points to change the milieu and provide new opportunities for development, e.g., moving from institutional care to an alternative program or engaging a peer mentor



While the clinical strategies noted above apply to all children and adolescents during the course of their development, Magellan considers many youth to be at very high risk for developing MEB disorders in the following situations:

- Parents have substance use or mental health disorders
- Children are abused and neglected
- Children are in foster care
- Parents are absent or incarcerated
- Children are exposed to violence, trauma and/or death of a parent

Consequently, Magellan prioritizes:

- Maltreatment prevention
- Academic achievement support
- Violence victims

We address conduct problems, mood disorders, substance abuse, anxiety and multiple disorders including intellectual and developmental disabilities (IDDs) (p.152).[1]

Magellan's strategic interventions and priorities noted above advance our goal to prevent and treat the spectrum of mental problems (e.g., from serious mental illness[es] to problematic behavior), and to promote positive mental health in young people. High levels of life satisfaction, positive affect (i.e., emotional well-being) and psychosocial functioning experienced by children and adolescents are necessary building blocks to develop resilience—that is, the ability to adapt well to adversity, trauma, tragedy, threats, significant sources of stress and feelings of anxiety and uncertainty. Magellan further contends that a spirit of hope is essential for young people and their families who are served by our staff and providers so that they may develop skills for resiliency and optimal recovery.[1][5]

Children and adolescents at high risk: Important characteristics and critical issues

Magellan recognizes a daunting challenge to effectively plan and adequately provide services for children and adolescents. A report published by the Center on the Developing Child at Harvard University noted the "remarkable convergence of new knowledge about the developing brain, the human genome, molecular biology, and the interdependence of cognitive, social, and emotional development offer scientists and policy makers an exceptional opportunity that did not exist a decade ago" (p.6).[6] This growing body of scientific information has confirmed our understanding of the ongoing construction of brain architecture and its impact on the first five years of a child's life, youth social and emotional development, and the emergence of new behavior and skills.[6][7]

Early childhood years (prenatal period to five years) are the most crucial time for caregivers to provide experiences that shape healthy brain circuits. While genes determine when specific brain circuits are formed, experiences actually shape their formation and are fueled by a self-initiated, inborn drive toward competence. This phenomenon depends on appropriate sensory input and stable, responsive



relationships whereby adults respond to a child's natural reaching out for interaction. This process is termed "mutuality and reciprocity" and is often referred to as a serve-and-return dynamic (p.8).[6] In addition, the effects of stress throughout childhood can either be growth-promoting or toxic. Specifically, positive stress, e.g., meeting new people or dealing with frustration, is an important and necessary aspect of development, along with tolerable stress, e.g., death of a loved one, divorce of one's parents or natural disasters, when accompanied by supportive parents/family or peers and social networks. However, toxic stress, e.g., recurrent child abuse or neglect, severe maternal depression, parental substance abuse or family violence, causes persistent elevations of stress hormones and altered levels of key brain chemicals, such as cortisol and adrenaline, that disrupt the developing brain and put children at high risk for developing MEB disorders and physical illness.[6][7][8]

Advances in neuroscience have contributed new data to the understanding of adolescent development. Specifically, it is now known that during adolescence, the brain experiences a period of major development comparable to that of early childhood.[9] During this time and in and early adulthood, many tasks must be mastered in order to develop greater autonomy and assume key adult roles/responsibilities, i.e.:

- Establish emotional and psychological independence
- Establish adult vocational goals
- Learn to manage sexuality/sexual identity
- Adopt a personal value system
- Develop increased impulse control and behavioral maturity

Specifically, neurophysiologic changes in the brain prime adolescents to take risks in order to learn from mistakes and gain coping/resiliency skills. Researchers have stressed a "neurological imperative" that teenagers be given ample opportunities to develop these competencies (p.5).[9]

In light of the above, Magellan emphasizes the following critical issues for high-risk groups within the child and adolescent population in order to effectively plan, deliver and evaluate services.



Children exposed to maltreatment and/or trauma

Maltreatment

The Children's Bureau (the Bureau), an Office of the Administration for Children and Families within the U.S. Department of Health and Human Services, has provided guidance and clarity that improve our understanding of the multifaceted and complicated issues that comprise child maltreatment. The Bureau indicates that as of 2010, the Federal Child Abuse Prevention and Treatment Act (CAPTA) defines child abuse and neglect (i.e., maltreatment) as, at a minimum: "Any recent act or failure to act on the part of a parent or caretaker, which results in death, serious physical or emotional harm, sexual abuse or exploitation, or an act or failure to act which presents an imminent risk of serious harm." [10] The Bureau delineates the following categories of child maltreatment: [11]

- 1. **Physical abuse**—a non-accidental physical injury by a parent, caregiver or trusted adult with whom the child has regular contact, e.g., teacher, babysitter or coach
- 2. **Neglect**—failure of a parent or caregiver to protect a child or youth from harm or provide basic needs, i.e., food, shelter, supervision, medical care and emotional nurturing
- 3. **Sexual abuse**—forcing or coercing a child or youth to engage in sexual activity, including exploitation through pornography
- 4. **Emotional abuse**—a pattern of behavior that hurts the emotional development or sense of selfworth of a child or youth, e.g., constant criticism, threats or sarcasm; belittling, shaming or withholding love

While child abuse is more widely acknowledged and publicized, child neglect is, in fact, the most common type of child maltreatment, which frequently goes underreported.[12] Expanding on the earlier discussion of impaired brain development, it is now understood that lack of stimulation and necessary care early in life may cause children to remain in a state of "hyperarousal" (i.e., constantly anticipating threats and/or experiencing dissociation) rather than a normal state of attentive calm. This phenomenon leads to a decreased ability to benefit from social, emotional and cognitive experiences and results in other psychosocial consequences. Together with insecure attachments, this state of hyperarousal can significantly affect normal growth and development. As a result, children who are neglected are unable to form secure attachments with primary caregivers and may:[13]

- 1. Mistrust others
- 2. Be unable to:
 - a. Understand the emotions of others
 - b. Regulate their own emotions
 - c. Form/maintain relationships
 - d. Feel remorse or empathy
- 3. Have an impaired social cognition, i.e., an awareness of oneself in relation to others



Trauma

According to The National Child Traumatic Stress Network (NCTSN), children can be exposed to a range of traumatic experiences. Research indicated that young children, even infants, may be affected by events that threaten their safety or the safety of their parents and caregivers. [14][15] Trauma can be the result of victimization (e.g., child physical or sexual abuse), and/or domestic violence, or the result of natural disasters, accidents or war. Young children may also experience traumatic stress in response to painful medical procedures or the sudden loss of a parent/caregiver.

It is important to note that trauma in very young children (0–6 years) has an even more profound effect than trauma experienced by older children and adolescents. Very young children's reaction to trauma is unique because of its profound effect on the developing brain cortex, concomitant shattered sense of safety, and fears and fantasies that thoughts, wishes and fears may have power to become real. The most common traumatic stressors for very young children include: [14]

- Accidents
- Physical trauma
- Abuse
- Neglect
- Exposure to domestic and community violence

A report of the American Psychological Association (APA) Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents (2009) delineates the variety of reactions to trauma that children may display and stresses the importance to clinicians, caseworkers, educators and others who work with youth to recognize them in their usual surveillance and screening efforts. These reactions can include:[16]

- Developmental delays
- Development of new fears
- Separation anxiety
- Sleep disturbances
- Sadness
- Loss of interest in normal activities
- Numbing
- Reduced ability to concentrate
- Decline in schoolwork performance
- Anger
- Somatic complaints
- Irritability

According to the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*, there are reactions to traumatic/stressful events that manifest anxiety- or fear-based symptoms. In the DSM-5 diagnostic category *Trauma- and Stressor-Related Disorders*, the prominent clinical characteristics



exhibited are anhedonic and dysphoric symptoms, externalization of angry and aggressive symptoms, or dissociative symptoms. The disorders in this category include:

- 1. Posttraumatic stress disorder (PTSD)
- 2. Acute stress disorder
- 3. Reactive attachment disorder
- 4. Disinhibited social engagement disorder

The latter two disorders have the additional diagnostic requirement of social neglect (i.e., the absence of adequate caregiving during childhood). Despite their common etiology of neglect, reactive attachment disorder is expressed as an internalizing disorder with depressive symptoms and withdrawn behavior, while disinhibited social engagement disorder is marked by disinhibition and externalized behavior.[17]

In the formal development process conducted by an APA Task Force to revise the diagnostic criteria for *Trauma- and Stressor-Related Disorders* in DSM-5, there was considerable attention and debate around the problem of sequential traumatization (also referred to as complex, chronic or developmental trauma). Sequential traumatization is a series of related and repeated traumas and/or maltreatment often committed secretly over long periods by persons close to the victim, e.g., intimate partner of parent/caregiver. The APA Task Force report on Posttraumatic Stress Disorder and Trauma in Children and Adolescents indicates that "children exposed to chronic and pervasive trauma are especially vulnerable to the impact of subsequent trauma." [18] The APA emphasizes that children who live with chronic trauma may "have no opportunity to heal between events." [19]

Schmid et al. proposed a "developmental heterotopia" of trauma where repeatedly traumatized patients tend to exhibit a typical pattern of successive psychiatric disorders at different stages of development (p.12):[20]

- Infancy—Regulatory disorders
- **Preschool age**—Attachment disorders with/or without disinhibition
- School age—Hyperkinetic conduct disorder
- Adolescence—Combined conduct and emotional disorders
- Young adulthood—Personality disorders, substance abuse, self-harm and affective disorders

This schema may provide a paradigm to understand the consequences of severe and complex trauma and help to improve case identification and program planning across disciplines.

Extensive research has shown the relationship between childhood trauma and the resulting negative impacts on adolescent and adult mental health. Some studies have found an association between trauma and psychosis. Childhood trauma has been found to not only increase the risk for psychosis and the severity of symptoms, but also increase the likelihood of behavioral health comorbid conditions.[21][22]



Children involved in child welfare systems

International statistics suggest that an increasing number of children experience life in foster care.[23] Many children who are placed in foster care have experienced maltreatment in the form of physical, sexual, or psychological abuse and/or neglect, with estimates of prevalence as high as 60%. Entering foster care is also strongly associated with poverty and deprivation (low income, parental unemployment and relationship breakdown). Moreover, it is estimated that more than 80% of children enter the foster care system due to parental substance abuse. [23][24] In their published practitioner review, Leve et al. (2012) reported that approximately one million cases of abuse and neglect are substantiated in the United States each year, with approximately one in two of these children referred to live in out-of-home care. From the National Survey of Child and Adolescent Well-Being (NSCAW), the authors noted evidence of widespread mental health problems in children in foster placement. Specifically, in this nationally representative sample of 6,200 children and families investigated by the child welfare system, nearly half showed emotional and behavioral problems, with higher rates among children placed into out-of-home care. Further, it was demonstrated that these problems extend into adulthood. Among the children in foster placement in the U.S. who participated in the NSCAW as adolescents, some 17% had been arrested at follow-up into adulthood, with arrest rates more than four times the national rate for 18- to 24-year olds.[23]

To fully appreciate the challenges facing our nation's foster care system, it is important to understand that foster caregivers frequently endure much stress and show increased stress sensitivity to these children's problematic behavior over time. Conversely, children in foster placement who have suffered from neglect and/or disordered attachments will show increased physiological reactivity during attachment tasks. These bidirectional dynamics often lead to placement and reunification failures. This was also evident in data from the NSCAW that revealed a rate of 30% placement instability over an 18-month period. Further, the U.S. sample of these data indicated an association between aggressive, destructive and oppositional behaviors and placement disruptions. This problem is significantly exacerbated when the number of behavioral problems per child exceeds six per day.[23] The older a child is when first placed in foster care has also been shown to increase the likelihood of placement breakdown and behavioral problems.[24]

The Annie E. Casey Foundation has extensively studied child/foster care arrangements and supports the "kinship care" option of placement for children who are unable to live with parents for whatever reason.[25] Kinship care is full-time, live-in childcare by blood relatives or other adults with whom the child has a family-like relationship, e.g., godparent or close family friends. As of 2018, more than 2.6 million children in the United States live in kinship care.[26] In a Kids Count Policy Report, *Stepping Up for Kids* (2012), the Annie E. Casey Foundation acknowledged the growing body of research evidence confirming that "Children in kinship foster care are better able to adjust to their new environment and are less likely to experience behavioral problems and psychiatric disorders than those in the general foster care population [and] experience fewer school disruptions than children in non-kin foster care" (p.4).[27]



Children with parents who have mental health/substance use disorders (SUDs)

There are many serious risks to children and adolescents who have a parent or both parents with mental illness. The American Academy of Child and Adolescent Psychiatry (AACAP) calls attention to the strong genetic predisposition in children for inheriting bipolar disorder, an anxiety disorder, attention deficit-hyperactivity disorder (ADHD), schizophrenia, alcoholism or other SUD, or depression. Recent studies have also demonstrated delayed brain development in young children of depressed mothers. [28] Further, the AACAP notes the additional stress that mental illness places on a marriage and parenting abilities of the couple, and the risks that stem from an inconsistent, unpredictable family environment can contribute to psychiatric illness and developmental delays in children. [29][30] Thus, there is need for both child and adult services to work together and incorporate needs of every family member into the treatment plan in order to effectively deliver both treatment and social services. [31]

A Children's Bureau Research-to-Practice Brief, Supporting Children of Parents with Cooccurring Mental Illness and Substance Abuse (2012), identified the "trifecta of parental mental illness, substance abuse and domestic violence" which brings with it a two to five times greater risk for homelessness, use of food banks, lack of needed medical care, unreliable or unsafe child care, and placement in foster care for the children at home (p.2).[32] Many of these children live in single-parent households where the caretaker has schizophrenia, bipolar disorder, depression or other serious psychiatric disorders.[33] Children in this circumstance can experience isolation from peers, adults and possible supports. In addition, the parent with a mental illness and/or SUD may be incapacitated at times, requiring the child to act as a parent at home and take on household tasks that are not age-appropriate, e.g., caring for a younger sibling, making meals, doing laundry and buying groceries.[32][34][35]

It is widely acknowledged that treating the individual without family involvement may limit the effectiveness of treatment, especially when the parent who abuses substances is a focus of concern. [29][34] In a published clinical review (2013), Lander et al. have discussed the importance of understanding the family's specific developmental stage in order to assess their interventional needs based on the eight stages of a family lifecycle and corresponding family developmental tasks. As with a person's individual growth and development, SUDs, with or without concomitant MEB disorders, can cause families to fail to achieve the following milestones over time:

- 1. Establishing secure attachments between parents and child(ren)
- 2. Oversight/involvement in children's growth and development
- 3. Ensuring integration into the community of school-age children
- 4. Encouraging and participating in children's education
- 5. Helping teenagers balance freedom with responsibility, establish healthy peer relationships and develop education/career goals
- 6. Releasing young adult children to their newly created milieu with appropriate assistance

This lack of family developmental progress may substantially contribute to the emergence of clinical symptoms in family members.[34] Therefore, the critical challenges facing our SOC and education for children with parents with mental illness require a sophisticated understanding of the myriad problems



(i.e., psychological, development, academic and relational) that need to be addressed in synchronization with the family's needs and stage of their life cycle.

Children with absent/incarcerated parents

According to the National Resource Center on Children and Families of the Incarcerated at Rutgers University (NRCCFI), "On any given day, an estimated 2.7 million children in America have at least one parent in prison or jail." [36]

The U.S. has very high rates of incarceration, with estimates of a four-fold increase over the past generation and some communities having as many as three-quarters of the families with an absent father. There are experts in the criminal justice system who consider the U.S. to be in an era of "mass incarceration." A consequence of more imprisonments has meant that "by getting tough on crime, the U.S. has gotten tough on children" (p.35).[37] The loss of a parent to incarceration is a very traumatic event for a child and may result in negative consequences such as attachment difficulties, anger, depression, regression and other anti-social behaviors. These painful consequences to children are very often compounded by stigma. Experts have warned that even for children who are coping well or who live in neighborhoods with a high rate of incarceration, there are added challenges of overcoming the stereotype that they are destined for a life of behavioral problems and failures.[37][38]

Children who have an absent parent due to incarceration experience a disruption in their relationship, including an alteration in their extended network of familial support. This requires more oversight and assistance from schools, foster care, adoption agencies, other youth-serving organizations and clinical providers. The Federal Interagency Working Group for Children of Incarcerated Parents has recommended approaches that anticipate the challenges that young people face not only when a parent is incarcerated, but also when participating in the family reunification and prisoner reentry process. Strategies to improve outcomes for children during the prison term include: [38]

- 1. Ensuring jail and prison visiting conditions are sensitive to true needs of children
- 2. Offering opportunities for incarcerated parents to increase their parenting capacities to nurture and support their children
- 3. Promoting opportunities for positive and ongoing communications
- 4. Working to facilitate a parent's involvement in his/her child's schooling where appropriate, despite the obstacles inherent in incarceration

When prisoners return home, they face multiple hurdles such as securing employment, receiving medical care and finding continued treatments for mental illness and substance abuse. Many returning prisoners will be under legal supervision, and therefore, children will need to adapt to the involvement of probation and parole agencies in their newly reconstructed lives. The most effective strategies at this point involve working with prisoners and their families to maximize the support they can provide to each other and direct the entire family to "external sources of emotional and other sustenance" (p.40).[37]



Children with disruptive behaviors, impulse control issues and conduct disorders

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), it is essential to inform treatment providers, educators and family about disruptive, impulse-control and conduct disorders because of their seriousness and impact. Specifically, these disorders occur across the stages of child and youth development, have a significant effect on a child's functioning across many social settings (e.g., home, school, community) and can involve multiple service sectors (e.g., mental health, education, child welfare, juvenile justice). As such, they can result in great social costs to communities when untreated.[39] These disorders are all characterized by problems with emotional and behavioral control, tend to have first onset in childhood or adolescence and are more common in males than females, although the relative degree of male predominance may differ across disorders and within a disorder at different ages.[17]

Disruptive, impulse-control and conduct disorders have been linked to a common externalizing spectrum associated with the personality dimensions labeled as disinhibition and (inversely) constraint, and, to a lesser extent, negative emotionality. These shared personality dimensions could account for the high level of comorbidity among these disorders, and their frequent comorbidity with SUDs and antisocial personality disorder. [17]

The newly revised DSM-5 now includes the following diagnostic categories in this group:

- 1. Oppositional defiant disorder (ODD)
- 2. Intermittent explosive disorder (IED)
- 3. Conduct disorder
- 4. Pyromania
- 5. Kleptomania
- 6. Antisocial personality disorder

The developmental relationship between ODD and conduct disorder was clarified in DSM-5, noting that children and adolescents with conduct disorder would have met ODD criteria if their symptoms emerged prior to adolescence. However, it was emphasized that most children with ODD do not develop conduct disorder but were at heightened risk for developing other problems.[17] In children with ODD, there is an ongoing pattern of uncooperative, defiant and hostile behavior toward authority figures that interferes with a child's ability to function in their daily routine; there may be other concomitant disorders present such as ADHD, learning disabilities, mood disorders and anxiety disorders.[40]

According to the AACAP, children with conduct disorder are "often viewed by other children, adults and social agencies as 'bad' or delinquent, rather than mentally ill," since they have great difficulty behaving in a socially acceptable way (i.e., aggression to people and animals, destruction of property, deceitfulness, lying or stealing, and/or serious violations of rules).[41] It is estimated that at least 50% of children with conduct disorder are diagnosed with ADHD, learning difficulties, co-occurring mood/anxiety disorders, PTSD and/or SUDs.[42] DSM-5 clarifies that the essential features of the



disorder (i.e., the core symptoms of conduct disorder) begin in childhood or early adolescence and continue until adulthood.

Along with a pervasive pattern of disregard for and violation of the rights of others, individuals with conduct disorder possess core features of deceit and manipulation and, not infrequently, lack of remorse. The highest prevalence of this disorder have been found in males with alcohol use disorder; in substance abuse clinics, prisons and other forensic settings; and in those affected by adverse socioeconomic or sociocultural factors.[17]

Recent clinical inquiry at Duke University has attempted to more fully understand the geneticenvironmental interplay of antisocial behaviors in conduct disorder and use this information to begin designing developmentally based prevention strategies that target pathways to chronic violence. Dodge et al., have encouraged the exploration of preventive efforts aimed at ameliorating early symptoms of conduct disorder and stopping the "pernicious persistence of antisocial behavior" (p.277).[43] Specifically, the authors support interventions that harness theories developed from descriptive psychological studies:[43]

- 1. Genetic factors can exacerbate or mitigate the impact of traumatic environmental experiences, e.g., early physical abuse.
- 2. A calm temperament can mitigate the toxic factor of chronic peer social rejection in antisocial development.
- 3. Parenting behaviors, e.g., restrictiveness, monitoring and supervision, can mute the impact of genetic predispositions of antisocial personality traits.

Children with anxiety and/or depression

Anxiety

Despite its high prevalence and associations with various negative outcomes, childhood anxiety is often undetected and undertreated. According to the AACAP Practice Parameter for the Assessment and Treatment of Children and Adolescents with Anxiety Disorders, anxiety disorders represent the most common forms of psychopathology among children and adolescents and differ from developmentally normative fear/anxiety by being excessive or persisting beyond developmentally appropriate periods. The most recent epidemiological data (2011) indicated an estimated global prevalence of any anxiety disorder in children (age range of 3 to 17 years) to be 7.2%.[17][44][45] Since then, obsessive-compulsive and other related disorders have been placed in their own diagnostic category in DSM-5 that is now distinct from, but still related to, anxiety disorders.[17]



Salum et al., of the National Institutes of Mental Health (NIMH) Intramural Research Program, Emotion and Development Branch, have studied prevalence samples for each anxiety disorder and found they have shown a developmental pattern of age at onset for each disorder. Analyzing samples from Brazil, the U.S. and Europe, the authors reported the following:[45]

- 1. Separation anxiety disorders and specific phobias have the earliest age of onset emerging before ages 5 and 8, respectively.
- 2. Social anxiety disorder and obsessive-compulsive disorder (OCD) typically emerge in adolescence, with half of the cases emerging before ages 12 and 14, respectively.
- 3. Generalized anxiety disorder (GAD) may emerge in early adolescence but the median age at onset is 16–18 years.
- 4. Agoraphobia, panic disorder and PTSD have a low prevalence in childhood but show higher prevalence in late adolescence and early adult years where age of onset is 17, 19 and 22 respectively.

In addition, these data revealed very helpful prognostications about the course of illness in populations of anxious youth. Salum et al., indicated that in broad terms, their samples revealed that "about one-third of anxious children achieve a long-term remission, another third persists with strict or broad anxiety continuity (frequently accompanied by comorbid disorder), and the final third remits from anxiety and develops a sequential heterotypic comorbidity (mainly with major depression and substance abuse)" (p.54).[45]

Depression

Magellan recognizes that untreated depression can often exacerbate other forms of pathology such as anxiety disorders, disruptive, impulse-control and conduct disruptive behavior disorders, and recurrent psychosis. Depressive disorders are considered heterogeneous conditions wherein genetic factors, multiple etiological processes and developmental pathways, along with early childhood adversity, are known to contribute to their emergence and recrudescence.[46] According to the AACAP Practice Parameter for the Assessment and Treatment of Children and Adolescents with Depressive Disorders, about 5% of children and adolescents in the general population suffer from depression at any given time. Specifically, the parameter targets those children under stress, who experience loss, or who have attention, learning, conduct or anxiety disorders to be at higher risk for developing depression.[47][48]

While the clinical picture of depression in youth is similar to adults, it is important to note differences that can be attributed to the child's physical, emotional, cognitive and social developmental stages. As such, it may not be unusual for children to have mood lability, irritability (also as the predominant feature), low frustration tolerance, temper tantrums, somatic complaints and/or social withdrawal instead of verbalizing feelings of depression.[47] Further, depression in adolescents is more often missed than it is in adults, possibly because of the prominence of irritability, mood reactivity and fluctuating symptoms.[49] In a published clinical review of neuropsychological assessments and interventions for depressed children, Feifer and Rattan suggested that "early onset depression reflected biological factors manifested by a child's core temperamental make-up," especially an inhibited temperament, "whereas later onset depression may be related more to the cumulative



effects of an interaction between biological markers and environmental stressors that impede successful social and emotional encounters in the face of interpersonal challenges" (p.76).[46]

A landmark epidemiological study by Moreno et al., published in 2007, reported a rapid increase in the diagnosis of youth bipolar disorder in office-based medical settings. While the number increased 40-fold from 1994 to 2003, researchers suggested this rise reflected a current tendency to over-diagnose bipolar disorder in young people or attempt to correct historical under-recognition of the condition—or possibly a combination of both. Authors further speculated that symptoms of excessive irritability and impulsivity seen in these children may have been indicative of another mood disturbance or comorbid ADHD symptoms.[50][51] In light of these issues, DSM-5 defined a new diagnosis in the depressive disorders category termed disruptive mood dysregulation disorder. This new diagnostic entity is intended for children up to 12 years of age who present with persistent irritability and frequent episodes of extreme behavioral dyscontrol.[17]

The diagnosis of bipolar disorder in children and teens is complex and involves an extended period of observation over time, since many of the symptoms resembling mania may be similar to signs that occur in teenagers with other problems (e.g., drug abuse, delinquency, ADHD and possibly schizophrenia).[52] When a child or adolescent is diagnosed with bipolar disorder, however, it is more common to see bipolar depression than mania or hypomania. Further, pediatric bipolar depression can be debilitating, given the elevated levels of psychosocial disability, and dangerous, due to high morbidity and increased serious risk of suicide.[53] In addition, it has been shown that youth with bipolar disorder are 1.5 to 2.5 times more likely to use the emergency department than youth with other or no mental health disorders.[54]

Youth suicide

Youth suicide is a serious public health problem. According to 2018 data from the Centers for Disease Control and Prevention (CDC), suicide is now the second leading cause of death of youth aged 10 to 24.[55] A deeper dive into the cause of suicide death for ages 10-14 years reveals death by suffocation is most prevalent, followed by death by firearm.[55] A CDC report on mental health, substance use and suicidal ideation during the COVID-19 pandemic shows that while 11% of adults seriously contemplated suicide in June 2020, the same was disproportionately reported by young people aged 18 to 24 (26%).[56]

Magellan has observed that 12% of elementary school students admit to suicidal ideas, threats or attempts. In adolescents, there are four times as many female attempts compared to males (326 per 100,000 females vs. 73 males). Depending on the study, the adolescent ratio of attempted-to-completed suicide averages from 50 to 200. Moreover, the rate of suicide among adolescents in the U.S. has tripled since the 1950s, with almost 16% of students in grades 9 to 12 having seriously considered suicide, and 7.8% having attempted suicide one or more times in the past 12 months.[55][57] During 2009–2018, suicide rates among youth aged 14–18 years increased by 61.7% from 6.0 to 9.7 per 100,000 population.[58]. A report of the U.S. Surgeon General and of the National Action Alliance for Suicide Prevention, 2012 National Strategy for Suicide Prevention: Goals and Objectives for Action, was published in order to familiarize stakeholders with the idea "that suicide is a



complicated issue that requires equally complex solutions"... and "effective solutions need to incorporate multiple approaches at multiple levels" (p.6).[59] In order to understand the seriousness and magnitude of the problem and to effectively plan youth-specific suicide prevention strategies, the Surgeon General's report delineated specific demographic cohorts of children and adolescents who are at particularly high risk for suicide. Children and adolescents noted to be of special concern are as follows:[59]

- Having a comorbid mood/anxiety disorder and especially bipolar depression—Where suicide rates are up to 25 times higher than the general population
- Abusing alcohol and/or drugs—Where alcohol is a factor in approximately one-third of reported suicides
- Engaging in acts of self-injury—Where such acts may lead to suicide later in life
- **Being incarcerated or in a secure justice setting**—Where suicide rates in prison are three times greater than among the general population
- Being in the foster care system—Where individuals are three times more likely to consider suicide and four times more likely to attempt suicide than those who had never been in foster care
- Having a lesbian, gay, bisexual and transgender [LGBT] identity—Where LGBT adolescents are
 three times more likely to report a lifetime suicide attempt and four times as likely to make a
 medically serious attempt than heterosexual youth

In addition to these specific groups, it has been noted that "contagion," i.e., "a process by which exposure to suicide or suicidal behavior of one or more individuals influences others to attempt or commit suicide," is a phenomenon that must also be recognized and appreciated in adolescents even when knowledge of the event is learned from the media/internet (p.122).[46]

Early motherhood

Early motherhood resulting from an adolescent pregnancy is a psychosocial risk factor that is related to poorer mental health outcomes (frequently mood disorders) and higher rates of poor obstetric outcomes (i.e., infant and neonatal deaths, preterm birth and low birth weight), especially for non-Hispanic Black mothers and infants.[60] In a clinical report, *Care of Adolescent Parents and Their Children* (2012), The American Academy of Pediatrics (AAP) acknowledged research evidence supporting a high incidence of symptoms (e.g., 29%) in samples of adolescent mothers from varied ethnic backgrounds that were consistent with clinical depression in the first year postpartum. In addition, the report indicated that younger parental age (15–24 years) at the time of birth of a child was associated with higher risk of maternal depression and/or depression in fathers with no history of mood disorders.[60]

The many conflicting emotional reactions of pregnant teens were highlighted in the AACAP When Children Have Children Facts for Families (2008). These range from not wanting the baby, viewing the creation of a child as an achievement, keeping the child in order to please another family member or simply to want a baby to have someone to love—but not fully appreciating the demands and



responsibilities of parenting. Moreover, young parents are usually overwhelmed by guilt, anxiety and fears about the future. [61] Children born to adolescent mothers are also at risk for deficits in cognitive and social development. The AAP report indicated that adolescent mothers provide less stimulation (e.g., vocalization, touch, smiling) and are less accepting of their infant's needs. Infants born to adolescent mothers often reside in an impoverished literacy environment that may delay their oral language skills and impact their early reading ability. In addition, intimate partner violence (IPV) (e.g., verbal abuse, assault by a partner or family member, being in a fight or being hurt, or witnessing violence) may be increased during pregnancy; survey data reveals estimated rates of 3–19% in this group. Thus, conditions and opportunities for the further abuse and neglect of babies born to teenage mothers are in place. [60][61]

Children with substance use disorder(s) (SUDs)

Experimentation with drugs and alcohol during adolescence is common, especially when a teen's friends engage in use and exert peer pressure. The AACAP publications *Teens: Alcohol and Other Drugs Facts for Families* (2018) and *Marijuana and Teens Facts for Families* (2019) emphasized that a teenager's lack of concern for the consequences of drug/alcohol usage is most often fueled by feelings of indestructibility and immunity to problems.[62][63] Similarly, the historical AACAP *Practice Parameter for the Assessment and Treatment of Children and Adolescents with Substance Use Disorders* (2005) noted the inherent challenges of teen developmental tasks (i.e., forming a separate identity and preparing for adult life roles) lead to experimentation with a wide range of attitudes and behaviors including the use of psychoactive substances.[64] The AACAP Parameter also indicated that while most adolescents experiment with alcohol and tobacco, some advance to marijuana and a smaller portion go on to try other drugs.[64] The risk factors for developing SUDs include:[64][65][66]

- 1. Early aggressive behavior
- 2. Early onset of substance use
- 3. Lack of parental supervision
- 4. Drug availability
- 5. Rapid progression through the stages of substance use
- 6. A family history of SUDs
- 7. Depression
- 8. Low self-esteem
- 9. Feeling like one does not "fit in" or is "out of the mainstream"
- 10. Removal from primary caregivers because of suspected child abuse, neglect or caregiver impairment
- 11. Poverty

The AACAP Parameter indicated that "a hallmark of SUDs in adolescents is impairment in psychosocial and academic functioning" (p.610).[64] Thus, the most notable problems encountered by afflicted teens include family conflict or dysfunction, academic failure, and deviant or risk-taking behaviors. Moreover, this specific population of adolescents frequently experiences comorbid psychiatric disorders (e.g., ODD, CD, ADHD, anxiety and mood disorders).



Drug use trends

Monitoring the Future, National Survey Results on Drug Use, 1975–2019, 2019 Overview, Key Findings on Adolescent Drug Use, published by the University of Michigan Institute for Social Research, presents key findings on adolescent drug use in order to detect age effects, secular trends and cohort effects in substance use and related attitudes/beliefs. The report noted "we typically find that use, as well as positive attitudes and beliefs about use, increase across 8th, 10th, and 12th grades." [67]

From 2013-2016, the report noted that use of any illicit drug decreased among 10th and 12th graders, and from 2017-2019, use of any illicit drug use increased among 8th and 10th graders.[67] From 2014-2019, use of any illicit drug other than marijuana decreased among 10th and 12th graders, with no significant change among 8th graders.[67]

Relatively few drugs exhibited a significant decline in use in 2019, and most held steady, although the use of most drugs is well below the peak levels reached in recent years.[67]

The report noted "the most important finding to emerge from the 2019 survey is the continuing dramatic increase in vaping by adolescents." [67] According to the 2020 American Society of Addiction Medicine (ASAM) *Public Policy Statement on E-Cigarettes*, between 2013 and 2019, electronic cigarettes, or e-cigarettes, were the most commonly used tobacco product among youth, with 27.5% of high school students and 10.5% of middle school students reporting past-month use, compared to 5.8% of high school students and 2.3% of middle school students who reported past-month use of combustible cigarettes, which have been on the decline since the mid-1990s. [67][68]

This increase in e-cigarette usage is concerning, as longitudinal studies have shown that subsequent cigarette smoking increased fourfold among e-cigarette users.[69] The 2019 National Youth Tobacco Survey found that youth perceive e-cigarettes to be less harmful than combustible cigarettes and cites use by friends or family as well as availability of attractive flavors as the reasons for use.[68]

The 2019 University of Michigan report confirmed the fact that alcohol remains the substance most widely used by today's teenagers, i.e., 59% of students have consumed alcohol by the end of high school, and 25% have done so by 8th grade, with 41% and 10%, respectively, reported having been drunk at least once in their life.[67]

Adolescent use of marijuana

In the midst of increasing initiatives by states to legalize marijuana, ASAM provided an assessment of the consequences in its *White Paper on State-Level Proposals to Legalize Marijuana*. It noted that an estimated "9% of people who try marijuana become dependent," and "Those who begin using the drug in their teens have approximately a one in six risk of developing marijuana dependence." [70] In further discussion about the susceptibility of young people to marijuana addiction, the following was cited, "70% of all treatment admissions involving children aged 12 to 14 and 72% of admissions of children age 15 to 17 years cited primary marijuana abuse. [70] From 1992 to 2006, rates of admission for



children and teens under age 18 for marijuana as the primary substance of abuse increased by 188% while other drugs remained steady."[70]

Adolescent use of opioids

While the opioid epidemic continues in the United States, research among high school seniors from 2015-2019 reflects a significant decline in prescription opioid misuse, including OxyContin and Vicodin. In 2019, reported use by 12th graders was down to:[67]

- 2.7% for all narcotics other than heroin
- 1.7% for OxyContin
- 1.1% for Vicodin

Overall rates of prescription opioid misuse among high school seniors in 2019 were at their lowest levels since they were first recorded in 1991 in the 2019 University of Michigan report.[67] Heroin use also remains low among 12th graders, with 0.4% reporting use compared to the peak of 1.5% in 2000.[67]

Addressing SUDs among youth

In an effort to inform programs and policies with prevention science, ASAM offers recommendations in its 2018 *Public Policy Statement on Prevention* to address SUDs among youth. Recommendations for healthcare providers, and schools, families and communities include:[71]

"Healthcare providers should: Actively participate in community coalitions, school related activities and organizations, and the legislative/regulatory process at the county, state, and federal level to influence the adoption of policies that reduce risk factors and increase protective factors for unhealthy or harmful substance use, especially by youth."

"Schools, Families, and Communities should: Deploy evidence-informed programs to target youth at risk of using or misusing substances and use Evidence Based Interventions for school age children and adolescents in order to nurture the physical, cognitive and emotional development of children."

Children with multiple disorders (including intellectual and developmental disorders [IDDs])

Children and adolescents with co-occurring IDDs and mental illness (MI) are frequently referred to as a "special population" among professional communities/service agencies that assist in providing therapy, education, primary care, long-term medical oversight and individualized support to these clients. The American Medical Association (AMA) has instituted a policy to support the classification of individuals with intellectual disability (ID) as a "medically underserved population," and the Commission to End Health Care Disparities expanded its scope to include persons with ID. Serving this community requires much skill and reliance on multidisciplinary efforts due to the inherent complexity in assessing, treating and coordinating the needs of children with deficits in measured intelligence and other domains (e.g.,



self-care, social, self-help, communication, education and occupational functioning).[72][73] In addition, children with IDD often have multifaceted medical needs such as:[74]

- Epilepsy
- Gastro-esophageal reflux disorder (GERD)
- Sensory impairments
- Mobility problems
- Other metabolic or neurological conditions.

Further, monitoring a pharmacotherapeutic regimen and assessing its medication effects is significantly more difficult in this population because of an impaired ability to verbalize symptoms relevant to diagnosis, measurement of treatment efficacy and detection of side effects.[75]

In a published clinical review of IDD, Barnhill et al. (2012) indicated that lifetime prevalence data suggests that between 20% and 70% of individuals with IDD either experience significant behavioral problems (e.g., aggression, self-injurious behavior, property destruction, pica) or meet criteria for a bona fide mental disorder.[76] Further, behavioral treatment records and pharmacy data analyzed by Edelsohn et al. (2014) to determine psychotropic drug prescribing patterns for Medicaid recipients revealed that, among children diagnosed with IDD and a comorbid psychiatric disorder, the most frequent diagnoses were ADHD, autism or an externalizing disorder, i.e., conduct disorder, ODD and impulse control disorder.[77] In addition, this population frequently suffers from major depressive disorder, anxiety disorders and stereotypic movement disorders, further substantiating a higher prevalence rate of psychiatric disorders for children with IDD than what is observed in the general population.[75] The high prevalence rates of cooccurring MI have been linked to the following:[76]

- 1. Severity of ID
- 2. Global impairments in adaptability and resilience
- 3. Coexisting neurological/medical condition
- 4. Histories of major psychosocial and familial dysfunction; and
- 5. Abuse and neglect

Practitioners who diagnose and treat individuals with IDD (with or without psychiatric comorbid conditions) face a number of challenges that need to be addressed:

- 1. Stigma around disability and mental illness
- 2. Lack of specific and specialized training
- 3. Biases related to the population
- 4. Anxiety and intimidation when providing primary care
- 5. Negative attitudes and even use of pejorative terminology

These issues are often compounded by providers' lack of knowledge about community resources and available advocacy services.[73]



The National Association for Persons with Developmental Disabilities and Mental Health Needs (NADD) reported on 2013 data from state developmental disabilities (DD) agencies that showed this population comprised approximately one-third of the total population receiving state disability services nationwide. [72] Since then, the NADD has focused their efforts on awareness and advocacy to educate public and private funding organizations. They have also been developing an action plan that involves the stakeholders, including individuals, families and representatives of the broad array of services and support, necessary to meet the goal of full community engagement.



SECTION II: Foundations of a Comprehensive Community Healthcare System Serving Youth

Early identification and treatment in primary care and health/medical homes

According to the 1999 position of the Surgeon General of the United States: [78]

"Without intervention, child and adolescent psychiatric disorders frequently continue into adulthood...they tend to use more healthcare services and have higher healthcare costs than other adults. If the system does not appropriately screen and treat them early, these childhood disorders may persist and lead to a downward spiral of school failure, poor employment opportunities and poverty in adulthood. No other illnesses damage so many children so seriously."

Since early identification and treatment of children with mental health problems has the potential to reduce the burden of mental illness and its many consequences, Magellan wholeheartedly supports the national realignment of efforts put forth by professional organizations to strengthen partnerships with primary care physicians (PCPs) through appropriate training and enhanced collaborative relationships. The PCP setting is "ideal for initiating services to children with emerging developmental and behavioral problems and common mental health/substance use disorders." In addition, through collaboration with mental health professionals, PCPs can ensure whole-person care by offering integrated physical and behavioral health services.[78]

In order to foster strong relationships with PCPs, Magellan has ensured its network of behavioral health providers can fully support a SOC with the following tiers, based on levels of complexity:[79][80]

- 0—Preventive services and screening
- 1—Early intervention and routine care provision
- 2—Specialty consultation, treatment and coordination
- 3—Intensive mental health services for complex clinical problems

The expertise and oversight provided by Magellan's case management and care coordination teams ensure the appropriate amount of psychiatric involvement commensurate with these tiers, ranging from supportive to enhanced specialist consultation, and intervention with specialist consultation or multisystem service teams. Additionally, within all levels of service, Magellan considers patients and families as essential partners in care to identify strengths and needs, collaborate on developing plans of care, assist with care implementation, and evaluate the outcome and appropriateness of services. [80]



Screening and assessment

There is agreement among youth, parent child welfare advocates, and research, policy and service experts in the field of mental health (i.e., The Child Welfare-Mental Health [CW-MH] Best Practices Group and the National Center for Children in Poverty [NCCP]) that there is a gap between the need and receipt of services for children. [54][81][82] This has been demonstrated by increases in emergency department utilization rates of mental healthcare for children. Mental health-related emergency department visits range from 2% to 5% of all pediatric hospital emergency department visits; the rate is highest in rural areas (5%). [54] Mental health conditions seen in emergency departments are varied and often include the following:

- Suicide risk/attempts
- Exhibiting dangerous behaviors—especially by youth with bipolar disorder
- Substance use—especially marijuana, alcohol in combination with other drugs, and cocaine
- Violence-related conditions
- · Child abuse and neglect
- Mood disorders
- Anxiety disorders

Unfortunately, however, the NCCP reported in their *Issue Brief: Children and Youth Emergency Mental Health Care: A National Problem* (2007) that "emergency departments are poorly equipped to address the mental health needs of children, youth and families who seek psychiatric attention...due to long wait times, insufficient child and adolescent psychiatric expertise, whether on site or on call, and/or inferior quality of treatment."[54]

The NCCP also found that children and youth with mental health problems in foster care were more likely to use emergency departments than those without a mental health diagnosis and those with other chronic conditions. In addition, they noted that while non-White children and youth were more likely to access emergency departments for health and mental health related conditions, there was significant under-identification of psychiatric diagnoses for youth of color during these emergency encounters.[54] Further, since this concern about poor identification is pronounced in the foster care system, several professional associations have endorsed universal mental health screening for this population.[82] As discussed earlier in this section, family users of primary care services would typically receive appropriate mental health screening and therefore not need to use emergency department services, particularly for non-urgent psychiatric intervention. This does, however, require the collaboration of and a concerted effort among mental health professionals in primary care settings, child welfare agencies and care management organizations that provide assessment and referral services (clinical triage) in order to identify youth at risk and determine their needs. [54][82] The CW-MH Best Practices Group recommends the systematic screening of children and adolescents by using reliable and valid psychometric instruments that have been developed to detect mental health problems. Specifically, the CW-MH Group recommends their usage be an integral component of agency procedures for youth, e.g., within 72 hours of entry into foster care, and during pediatric emergency department visits, primary care encounters and clinical triage calls involving children



seeking service authorizations through managed care. Specifically, the CW-MH Group proposes using psychometric instruments to:

- Screen for acute/emergent risk
- Conduct comprehensive assessments for children with positive screening results
- Continue periodic screenings and assessments for ongoing mental health service needs

The following standardized instruments have been used effectively in the general pediatric population and high-risk groups:[14][81][82][83][84][85][86]

Screening for acute/emergent risk

- The Infant-Toddler Checklist from the Communication and Symbolic Behavior Scales Developmental Profile (CSBS-DP)
- Checklist for Autism in Toddlers (CHAT)
- Modified Checklist for Autism in Toddlers (M-CHAT)
- Preschool Age Psychiatric Assessment (PAPA)
- Ohio Youth Problem Functioning and Satisfaction Scales (OHIO Scales)
- Early warning signs checklists for relapse in bipolar depression and mania
- Strengths and Difficulties Questionnaire (SDQ)
- Posttraumatic Stress Disorder Semi-Structured Interview and Observation Record
- PTSD Symptoms in Preschool Aged Children (PTSD-PAC)

Comprehensive assessment for children with positive screening results

- Diagnostic Interview Schedule for Children (DISC)
- Behavior Assessment System for Children (BASC-2)
- Child Behavior Checklist (CBLC)

Ongoing screening and assessment for mental health needs

- Ages and Stages Questionnaires: Social and Emotion (ASQ-SE)
- Child and Adolescent Needs and Strengths (CANS)
- Diagnostic Interview Schedule for Children Predictive Scales (DPS)
- Child and Adolescent Level of Care Utilization System (CALOCUS)
- Child and Adolescent/Early Childhood Severity Intensity Index (CASII/ECSII)
- Child and Adolescent Functional Assessment Scale (CAFAS)
- Child Welfare Trauma Referral Tool
- UCLS PTSD Reaction Index
- Trauma Symptom Checklist for Children (TSCC)
- Trauma Symptom Checklist for Young Children (TSCYC)
- Trauma Events Screening Inventory (TESI)

The Identification and Evaluation of Children with Autism Spectrum Disorders guideline, published by the AAP in 2007 and reaffirmed in 2014, recommends a comprehensive evaluation after a positive screening for developmental delays, and it clearly delineates requirements for determining the



presence of suspected autism and/or other possible IDDs.[85][86] These evaluation components include:[85][86]

- Health, developmental and behavioral histories
- Physical exam (including audiological and vision evaluations) with a thorough search for dysmorphic features, neurologic abnormalities and skin pathology
- Evaluation of child's overall level of functioning
- Determination of motor-adaptive, problem-solving and social communication skills
- Determination of the presence of a DSM-5 diagnosis
- Assessment of parents' or caregivers' knowledge of IDD, coping skills and supports
- Laboratory investigation to search for known etiology or coexisting condition

The AAP compilation of *Mental Health Screening and Assessment Tools for Primary Care* provides a listing of mental health screening and assessment tools with considerations for psychometric properties, cultural sensitivity and cost, with references to publishers for materials. The compilation table includes subsections of mental health screening and assessment tools for the clinician's various stages of integrating a mental health approach, e.g., pre-visit data collection, emergencies and collateral information tools, such as caregiver and teacher reports. In addition to screenings are tools for assessment of common problems, exposure to trauma, psychosocial environmental risks, and developmental trajectory or cognitive development issues. The material contains test reliability, validity, sensitivity and specificity to assist in selection.[87]

Child and adolescent interventions and treatments

Intervention strategies shown to be effective for children who are vulnerable and at risk for poor outcomes should be based on scientific evidence and supportive of parents, providers of early childcare/education and other community members. As such, it is essential to further policies and deliver treatments that create a sturdy foundation for maintaining children in stable and stimulating environments while sustaining growth and development in order to ensure school achievement, economic productivity and responsible citizenship. The Center on the Developing Child at Harvard University warns that "quick fixes and magic bullets" are not available to developmentally sensitive systems of care and provider networks.

Evidence-informed psychosocial treatments

Despite cumulative research evidence, prescribers often employ medication too early in a treatment regimen rather than attempting to ameliorate the child's psychiatric symptomatology with psychosocial, behavioral or family interventions as a first step.[88] This controversial practice has led to a renewed interest in and application of efficacious psychotherapeutic modalities with children of all ages. The AACAP underscored the importance of this premise in the *Policy Statement: Psychotherapy as a Core Competence of Child And Adolescent Psychiatrist* (2014), noting "Psychotherapies remain essential treatment modalities for children's cognitive, emotional, behavioral and relational problems and evidence suggests their efficacy as monotherapy or in combination with psychopharmacologic



treatments for multiple disorders in youth..." and "psychotherapeutic concepts are of central importance in assessing and providing care to children, adolescents, their families and their communities (e.g., schools, other healthcare providers)." Moreover, utilizing psychotherapeutic principles and techniques should be incorporated with the "knowledge of psychological development, attachment, biology, physiology, pathology and other domains of medicine." [89]

In a textbook chapter and comprehensive clinical overview/discussion of the treatment of children and adolescents with MEB disorders, Johnson, et al., reiterated overarching clinical goals:[75]

- Reduction of symptoms
- Improvement of emotional and behavioral functioning
- · Remediation of skill deficits
- Removal of obstacles to normal development

These goals may be met through a therapist or counselor's creative use of play in younger children, or creative writing and expressive arts for adolescents, in order to compensate for limits on ability to use abstract language. Further, the authors emphasized that in the treatment of children, "there are at least two clients, the parent and the child, whose perceptions of the problem and goals for treatment often conflict" (chapter 34, p.1, online version). [75] In child welfare agencies, the CW-MH Group guidelines noted the importance of offering psychosocial treatments "to children and families that are individualized and strengths-based. Specifically, the interventions should reflect the goals for the permanency plan, actively involve the current caregivers, and when feasible, include the caregivers of origin at the clinically appropriate level." [81] In addition, use of psychosocial treatments with children and adolescents requires consideration, and often cooperation, of pediatricians, welfare agencies, courts, teachers and recreation leaders to fully embrace the young patient's environment and family dynamics. [75]

To meet the needs of a high-risk population, a healthcare system serving youth should maintain a network of credentialed practitioners demonstrating competency in the following core evidence-based psychosocial interventions:[7][23][47][49][54][64][75][81][90][91][92][93][94][95][96][97]

Supportive therapy—This intervention is based on a therapeutic relationship whereby the therapist supports a young patient under considerable stress. This support provides empathy and offers prudent advice and counsel while helping the child verbally express feelings. The intervention continues until the stressor resolves, the developmental crisis has passed, or the patient and/or environment is changed enough to allow significant adults or parents to take the lead supportive role.

Interpersonal therapy (IPT)—This intervention is considered a brief or short-term relational therapy where the presenting problem of a young patient reflects difficulties in significant relationships. The primary focus of IPT is on the relationship and communication with others who are currently important in the child's life. Specifically, IPT is based on the biopsychosocial diathesis-stress model, i.e., where an acute interpersonal crisis will cause symptoms in an area of vulnerability in the child's attachment style (e.g., insecure, anxious/preoccupied, dismissive or fearful/avoidant). The therapist collaborates in problem-solving with the patient for symptom relief and age-appropriate independence in functioning.



Evidence has shown IPT to be particularly efficacious for young patients with mood and anxiety disorders, but it is not typically used for those with personality disorders who have difficulty forming and sustaining therapeutic alliances.

Cognitive behavioral therapy (CBT)—As a learning model of treatment, there are a variety of CBT models based on the theory that learned maladaptive patterns can be unlearned. They are employed in order to provide young patients an opportunity to acquire new and adaptive patterns of thought and action through skill development. Some CBT models use exposure (in vivo or through imagery) and response prevention (E/RP) as core therapeutic techniques to confront conditioned patterns of emotion (e.g., fear, anxiety) and behavior triggered by internal and environmental cues. This type of CBT is considered the first line of treatment for mild to moderate OCD and may be efficacious for treating GAD, separation anxiety disorder (SAD) and social phobia in children and adolescents. In high-risk populations, CBT demonstrates the strongest record of success with ethnic minority youth.

Trauma-focused CBT (TF-CBT) in both individual and group formats is recommended for the treatment of children and adolescents suffering from PTSD or other past traumas. The goal of TF-CBT is to help children and their parents overcome the negative effects of traumatic life experiences and teach new coping skills to manage them, e.g., regulating emotions, managing stress, maintaining personal safety, coping with future trauma reminders, and learning to link trauma-related thoughts to feelings and behaviors. This customized exposure method of CBT includes parents as agents of change and uses both psychoeducation and treatment components based on the acronym PRACTICE:

- 1. Parenting skills
- 2. Relaxation
- 3. Affective modulation
- 4. Cognitive coping and processing
- 5. <u>Trauma narrative</u>
- 6. In vivo mastery of trauma reminders
- 7. Conjoint child-parent sessions
- 8. Enhancing future safety and development

Cognitive reprocessing or cognitive restructuring principle-based CBT deals with automatic thought patterns that distort information processing and produce negative thoughts about self, others and the future. Using this method of CBT is recommended for adolescents who are depressed and/or have anger management issues. The goal is to help the young person identify dysfunctional thought patterns, challenge them and replace them with more constructive alternatives. These approaches are efficacious in the treatment of adolescent SUDs, altering the thought processes that lead to addiction and other maladaptive behaviors.

Behavior therapy—Behavioral therapy, including the techniques of behavioral modification, applied behavior analysis and contingency management, is commonly used in children and adolescents. To achieve maximum effectiveness, these programs require both home and school cooperation. They



should also focus on specific problematic behavior with contingent reward immediately following behaviors, in a consistent fashion.

It is critical that a behavioral therapy be based on a rigorous method of gathering information on problem behaviors such as a functional behavioral assessment (FBA). The underlying theory of FBA is that most problem behaviors serve an adaptive function of some type and are reinforced by consequences. FBA includes a behavioral program for maximum effectiveness and efficiency, as well as goal setting and monitoring. It requires a detailed description of the frequency and intensity of each problem behavior, and identifying the antecedents, consequences and other environmental factors that maintain the behavior.

Behavioral therapy techniques are effective in the treatment of simple phobias, enuresis and encopresis, and ADHD, and for noncompliant behaviors seen in ODD and conduct disorders. Intensive Applied Behavioral Analysis (ABA) is an evidence-informed and widely used treatment for Autism Spectrum Disorder, and more recently for children with IDD, where patterns of reinforcement are identified, and techniques are used to promote the desired behavioral alternative. Evidence has shown ABA techniques are effective when applied to academic tasks, adaptive living skills, communication, social skills and vocational skills.

Dialectical behavior therapy (DBT)—This is a type of cognitive behavioral therapy that uses behavioral therapy to help individuals develop healthy coping mechanisms and change negative thought patterns and behaviors into healthy behaviors with positive outcomes. This involves clinician validation, which helps the patient accept their negative behaviors and the need to change them. While this technique was initially used in borderline personality disorder, DBT has demonstrated success in reducing suicide risk in adolescents. Researchers from Seattle Children's Research Institute in demonstrated DBT used in individual and group therapy decreased repeat suicide attempts and self-harm by 55% from baseline (before treatment) to six months (end of treatment) in adolescents aged 12-18 years.[98]

Individualized educational interventions/skill-development models—Fostering the development of adaptive social skills is a major component of any program designed to assist children and adolescents with IDD who will require lifelong and individualized support. Key elements of person-centered planning for this population involve individualized plans, which match an educational program to the child's intellectual/conceptual level and ability to self-regulate emotions, in order to master tasks of daily living, academic and/or vocational skills, and interpersonal relationships in their family, school and community. Program components may focus on a number of areas that require assistance, including self-help and leisure skills, speech and non-verbal communication, and strategies for self-monitoring and self-reinforcement. Successful social skills programs employ a variety of tested techniques, e.g., demonstrations by instructors, modeling, role-playing, social practice, positive reinforcement and constructive feedback. Programs tend to enhance discrimination skills in children with IDD to provide the essential protection and support.



Family psychoeducation—This form of evidence-based intervention was developed to provide emotional support, health education and resources during times of crisis as well as teach problem-solving skills to families of individuals with mental illness. The results have demonstrated reduced relapse rates and improved recovery of individuals who have mental illness.

SAMHSA published the *Family Psychoeducation: The Evidence toolkit*, recently updated in 2019, which lists 15 principles for providers to follow when working with families:[99]

- Coordinate all elements of treatment and rehabilitation to ensure that everyone is working toward the same goals in a collaborative, supportive relationship.
- Pay attention to both the social and the clinical needs of the consumer.
- Provide optimum medication management.
- Listen to families' concerns and involve them as equal partners in the planning and delivery of treatment.
- Explore family members' expectations of the treatment program and expectations for the consumer.
- Assess the strengths and limitations of the family's ability to support the consumer.
- Help resolve family conflict by responding sensitively to emotional distress.
- Address feelings of loss.
- Provide relevant information for the consumer and his or her family at appropriate times.
- Provide an explicit crisis plan and professional response.
- Help improve communication among family members.
- Provide training for the family in structured problem-solving techniques.
- Encourage family members to expand their social support networks—for example, to participate in family support organizations such as NAMI.
- Be flexible in meeting the needs of the family.
- Provide the family with easy access to another professional in the event that the current work with the family ceases.

Parent counseling—This psychoeducational intervention providing guidance to parents is conducted with a single parent, a couple or in groups. A major focus of the session(s) is to teach parents about normal growth and development and help them better understand their child's problem, illness or long-term disability. It helps parents modify practices or issues that may be contributing to current difficulties (e.g., maternal over-involvement, paternal withdrawal, sibling conflicts). Parents learn to select appropriate treatments and educational programs and how to evaluate their effectiveness or need for modification. In essence, parents learn to become effective advocates for their children through enhanced parenting skills.



Parent training programs—This program is primarily for pregnant teenagers who, with their children, face a plethora of medical and psychosocial risks that should be addressed within comprehensive primary and obstetrical care. An important adjunctive component to medical oversight and counseling are home-, office-, or school-based interventions that incorporate intensive health education on the following crucial topics:

- 1. Pre-term/infant care and development
- 2. Hazards of smoking and substance use
- 3. Positive parenting techniques
- 4. Breastfeeding
- 5. Coping with stress associated with parenting

These interventions frequently use peer support and group techniques and should engage the adolescent or adult father of infants born to adolescent mothers whenever feasible.

There is also a body of research supporting the effectiveness of using a **parent management training** (PMT) model. Utilizing basic tenets of social leaning theory and operant conditioning, this model promotes positive parenting and caring relationships while teaching essential behavioral management skills, e.g., rewarding positive behavior, ignoring negative behaviors when necessary, and appropriate use of punishment. Evidence-based parent-focused interventions that exemplify this model include:

- Incredible Years: A training series for parents, teachers and children to advance the social and emotional behavior of children of all ethnic groups.
- Positive Parenting Program: A parenting and family support system designed to prevent—as well as treat—behavioral and emotional problems in children and teenagers.
- Project Keep (Keeping Foster and Kin Parents Supported and Trained): A program for foster and kinship parents to improve their children's behavior and decrease stress, all while building a supportive caregiver network.
- Attachment and Biobehavioral Catch-up intervention: A parenting intervention for caregivers of infants and toddlers who have experienced early adversity.
- Parent-child interaction therapy (PCIT): A structured program for parents who have a history of abusive behaviors that focuses on strengthening the parent-child attachment before teaching structured and consistent discipline.

Family therapy—This treatment is used when there are dysfunctional interactions or impaired communication within a family. It is often used when there are difficulties in developmental issues for the child or adolescent or when the family is undergoing significant and stressful changes (e.g., divorce, remarriage). Empirically supported family-based therapies are used for the treatment of conduct disorder and/or substance abuse in children and adolescents.

Brief strategic family therapy is a typically used approach in the youth population with SUDs. In these cases, the therapist seeks to change maladaptive family interaction patterns in the sessions by coaching the family in how to interact more functionally, and as treatment progresses, by restructuring malignant interactions.



Functional family therapy is used with older children who have disruptive behaviors and SUD. This intervention aims to enhance protective factors and reduce the risk factors within the family.

Multi-systemic family therapy (MST) is used in cases where the child or adolescent is exhibiting chronic disruptive or anti-social behavior and might otherwise be incarcerated, placed in residential treatment or hospitalized. The goal is to preserve families through the difficulty of raising very troubled teenagers through access to therapists on a 24/7 basis.

Multidimensional treatment foster care (MTFC) supports foster parents with the goal to ultimately return the child to their birth parents. This program marshals intensive therapeutic, supervisory and case management services by requiring close collaboration with all those involved in the child's life (i.e., program supervisor, case worker, parole or probation officer, teachers, work supervisors, foster and birth parents). This program has recently been tailored to preschoolers and has been specifically tailored to promote secure attachments in foster care and facilitate successful permanent placements such as family reunifications or adoption.

Motivational enhancement/motivational interviewing—Family therapy, CBT and developmentally appropriate Alcoholics Anonymous (AA)/Narcotics Anonymous (NA) self-help groups are recommended for the treatment of SUD in adolescents who are poorly motivated to acknowledge their problems or try to change. As semi-directive therapies, they are nonjudgmental and nonconfrontational interventions designed to move the adolescent to a state of motivation and readiness for change. The approaches attempt to increase the adolescent's awareness of the problems caused by the substance abuse and the consequences/risks of this lifestyle. Motivational interviewing principles strengthen the person's motivation, build a plan for change and teach coping strategies for relapse triggers and other high-risk situations.

Psychopharmacological treatment oversight and monitoring

Psychotropic medications are frequently used in treating children and adolescents with MEB disorders. In an era of evidence-based medicine, all health professionals and child welfare advocates should engage in a careful assessment of the risk and benefit of using psychopharmacological treatments in children and adolescents, understanding the serious concerns of over-diagnosis and over-treatment in this vulnerable population.

Magellan considered the approach to psychopharmacological treatment to be of utmost importance when we published and distributed *Appropriate Use of Psychotropic Drugs in Children and Adolescents: A Clinical Monograph - Important Issues and Evidence-Based Treatment* (2017) to serve as guidance to staff, network providers, caregivers and youth.[88] This clinical monograph provides a comprehensive discussion of many current clinical controversies in practice. The monograph discusses overuse of psychotropic drugs (particularly antipsychotics), polypharmacy, off-label use of drugs and inadequate preparation of PCPs prescribing psychotropic medications in severe and complex cases.

The publication discusses the issue of relying solely on pharmacologic interventions rather than adjunctive with psychotherapeutic treatment or after an initial trial of an appropriate psychosocial



intervention. In particular, the monograph identifies the significant trend where children in foster care have become increasingly vulnerable to inappropriate and excessive medication use. In light of these issues, the monograph highlighted the *AACAP Practice Parameter on the Use of Psychotropic Medication in Children and Adolescents* (2009) in order to promote the appropriate and safe use of psychotropic medication in youth with psychiatric disorders by emphasizing the best practice principles that underlie medication prescribing. It provides evidence from clinical trials, clinical practice guidelines and consensus panels on psychotropic drugs for the treatment of mood disorders, anxiety disorders, disruptive disorders, ADHD, autistic spectrum disorders and childhood schizophrenia. There are also detailed reference charts with pediatric drug tables for all classes of psychotropic drugs, with dosage ranges, Food and Drug Administration (FDA) approved age indications, warnings and precautions, side effects, teratogenic risks and clinical monitoring recommendations. [88] [100]

Many managed care organizations, child welfare agencies and state welfare departments have developed formalized audits to review treatment rendered and ensure that children and adolescents receiving psychotropic drugs are treated safely and effectively. While state laws and organization policies vary, the following domains are important to monitor:[82][101]

- **Informed consent** from the child or adolescent and/or legal guardian, for each psychotropic medication prescribed
- Patient assessment and evaluation to guide prescription of psychotropic medications
- **Use of credentialed and licensed providers** such as M.D., nurse practitioner or physician assistant
- Ongoing monitoring of clinical measures such as:
 - Blood pressure
 - Weight
 - Abdominal girth
 - Body Mass Index (BMI)
 - Abnormal Involuntary Movements (AIMS)
 - Laboratory test measures (i.e., fasting glucose, lipids, Complete Blood Count [CBC], liver function, lithium levels, thyroid function, renal function, valproic acid/carbamazepine levels)
 - Intra- and inter-class polypharmacy
- Adverse event reporting such as:
 - Drug reactions
 - Harmful drug events
 - Medication errors

Along with the domains listed above, it is also important to review treatment records to evaluate the quality of staff practices. These typically include indicators that demonstrate the following:

- Staff access to and documentation of psychotropic medication
- Ongoing communication of pertinent treatment issues with child and caregivers



- Staff use of reliable and valid rating scales to quantify response of target symptoms
- Evidence of child mental health training for case workers
- Provision of ongoing information to children and families on any diagnosed mental health problems

Staff should also document interactions with children and families that present effective treatment options and offer strategies for managing life with the MEB condition. This proactive step is especially important for transition-age youth (18–21 years old) leaving foster care and agency oversight.[101]

Family-driven, youth-guided components of care

The SOC concept for children and adolescents with mental health challenges and their families was first published in 1986 (Stroul & Friedman), articulating a definition for a SOC along with a framework and philosophy to guide its implementation. The concept and philosophy were the result of a participatory process that began with the 1984 initiation of the Child and Adolescent Service System Program (the first federal program to systematically address children's mental health) and involved multiple and diverse stakeholders, including policy makers, service providers, agency administrators, technical assistance providers, family members, advocates, leaders in cultural competence, researchers and others.

In an effort to meet the concrete needs of children and families with serious mental health challenges, SAMHSA launched a competitive grant in 1992 (Children's Mental Health Initiative [CMHI]) offering funding to states, tribes, territories and communities to develop and launch systems of care (SOCs).

SAMHSA required that the SOCs support a philosophy and set of core values emphasizing that services be community-based, family driven, youth guided, individualized, coordinated, and culturally and linguistically competent. To meet these transformational goals, the SOC would include the following: traditional and nontraditional services, informal and natural supports, and use of a "wraparound service planning process" to meet the unique potential and needs of the child.

Since then, the original SOC concept has guided the field in reforming child-serving systems, with elements of this approach found in most organizations serving high-risk youth today.[102] In 2014 and 2019, the AACAP endorsed "family-driven, youth-guided" care within the SOC approach. Specifically, the AACAP urges child and adolescent psychiatrists to embrace the concept and provide leadership for it, not only in traditional mental health settings, but in child welfare, juvenile justice, primary care and educational settings.[103] The AACAP also emphasized strengths-based care and the importance of identifying strengths in treatment. In accord with AACAP recommendations, the Child Welfare-Mental Health (CW-MH) Group emphasizes the importance of two key elements: parent/family engagement and youth empowerment/peer support.[81][82][103][104][105][106][107]

Parent/family engagement—These services are critical to help caregivers cope more effectively with the challenges associated with children diagnosed with MEB disorders and involvement with a child welfare system. They represent a constellation of formal and informal services that can tangibly help



families care for their children and help with out-of-home care placement and when returning home. Components of parent/family engagement should include:

- 1. Family self-help, support and advocacy groups
- 2. Information and referral
- 3. Education that will support families to become active and informed decision makers in their care and treatment planning
- 4. Formal advocacy with and on behalf of the family, if required
- 5. Capacity to individualize the services through flexibility and meeting unplanned needs in a timely fashion
- 6. When feasible, hiring peer (adult) family mentors as agency staff in order to help improve a family's access to services, increase family participation and mitigate distrust

Examples of evidence-based or promising programs include Co-Parenting, Parents Anonymous, Parent Engagement and Self-Advocacy Program [PESA], Parent Mentoring Program, Parent Cafes and Shared Family Care. While not an exclusive list, these programs have turned to parents for their input, expertise and guidance in program planning and development and have allowed them to engage in community and agency decisions about their children.

Youth empowerment/peer support—These programs aim to increase the sense of control youth have over their own lives by giving them opportunities to assume responsibility for making important life decisions. These opportunities are especially meaningful for high-risk youth who may be transitioning/aging out of foster care and/or are involved in the juvenile justice system. In many cases, these adolescents come from single-parent households where usually the father is absent. Moreover, some youth can exhibit multiple risk behaviors. They may have become involved with negative peers, struggle with academics or demonstrate negative school behaviors (e.g., suspensions or expulsions). The goals of youth empowerment programs are to provide opportunities for participants to obtain lifeenhancing skills through peer support from others who are dealing with, or who have overcome, similar life obstacles and challenges. The programs also allow youth to participate in important and meaningful community affairs.

A number of philosophies may undergird the specific youth empowerment program design, e.g., positive psychology, resilience and recovery or faith-based initiatives. Whatever the philosophical basis, areas that have typically been the focus of youth empowerment/peer support programs and essential to adolescent development include:

- Mentoring
- Academic remediation
- Education
- Vocational and employment preparation services
- College education attainment services
- Court-related services
- General youth empowerment



Examples of successful programs include:

- The Taking Control program
- The Getting Beyond the System (GBS) model
- Court Appointed Special Advocates (CASA)
- Foster Youth Services (FYS)
- Adoption and foster care mentoring
- AmeriCorps Foster Youth Mentoring Project (FYMP)
- Job Corps program
- General college and vocational preparation programs, e.g. Casey Life Skills
- Magellan Youth Leaders Inspiring Future Empowerment (MY LIFE), in multiple states including AZ, FL, LA, PA and WY

Transition to Independence Programs (TIPs) are youth empowerment programs that target youth who are aging out of, or transitioning, from residential treatment or behavioral health rehabilitation services, to help achieve success into adulthood. It is an evidence-based model developed to work with young people ages 16-26 who are experiencing emotional and/or behavioral difficulties. TIP engages and supports youth in their own future planning process and helps them achieve independence across five transition domains:

- Educational opportunities
- Living situation
- Employment and career
- Community life functioning
- Personal effectiveness and well-being

These programs have provided empowerment for youth, enabling them to assert themselves beyond the control of a foster care or other agency or treatment center, develop emotional regulation and gain a sense of control of their own maturation and progression to adulthood.

Culturally competent and trauma-informed approaches to care

Culturally competent care

Core intervention strategies based on program evaluation research may significantly alter family difficulties and a child's negative developmental spiral for the better. These include the following:[6]

- 1. Early and intensive support by skilled home visitors
- 2. High-quality center-based early education programs
- 3. Two-generation programs that simultaneously support parents while providing care/education for children
- 4. Work-based income supplements for families living in poverty



5. Specialized services ("trauma-informed") matched to the toxic stress experienced by the child, e.g., abuse, neglect, severe maternal depression, parental substance or family violence.

Additionally, psychosocial interventions for symptoms of MEB disorders in children and adolescents should be carefully planned with explicit developmental components. Specifically, an explanatory paradigm should stipulate which developmental parameters or skills are implicated in the unfolding of the illness and how dysfunction in that regard paves the way to the disorder.[108] Cultural and racial factors relating to the young person's mental illness or emotional disturbance deserve close attention and consideration. This requires special expertise and unique approaches to ensure the delivery of culturally competent services to children and adolescents.[109]

The AACAP Practice Parameter for Cultural Competence in Child and Adolescent Psychiatric Practice (2013) was developed as guidance to professionals who serve youth in our increasingly multiracial and multicultural nation. [109] These demographics are represented in the child welfare system where more than 50% of children and adolescents served are African American, Latinx and Native American. As such, these minority populations face unique challenges associated with mental illness, sources of stress, patterns of psychopathology, access to services and evidence-based treatments, and greater burden of morbidity and mortality.

Magellan supports the AACAP Practice Parameter to evaluate and treat children and adolescents with cultural competency and sensitivity to their diversity. The AACAP Parameter recommends clinicians do the following (p.1102–1112).[109]

- Identify and address barriers (economic, geographic, insurance, cultural beliefs, stigma, etc.)
 that may prevent culturally diverse children and their families from obtaining mental health services
- Conduct evaluations in the language in which the child and family are proficient
- Understand the impact of dual-language competence on the child's adaptation and functioning
- Be cognizant that cultural biases might interfere with their clinical judgment and work toward addressing these biases
- Apply knowledge of cultural differences in developmental progression, idiomatic expressions of distress and symptomatic presentation for different disorders to the clinical formulation and diagnosis
- Assess for a history of immigration-related loss or trauma and community trauma (violence, abuse) in the child and family and address these concerns in treatment
- Evaluate, and address in treatment, the acculturation level and presence of acculturation stress and intergenerational family conflict in diverse children and families
- Make special efforts to include family members and key members of traditional extended families, such as grandparents or other elders, in assessment, treatment planning and treatment
- Evaluate and incorporate cultural strengths (including values, beliefs and attitudes) in their treatment interventions to enhance the child's and family's participation in treatment and its effectiveness



- Treat culturally diverse children and their families in familiar settings within their communities whenever possible
- Support parents to develop appropriate behavioral management skills consonant with their cultural values and beliefs
- Preferentially use evidence-based psychological and pharmacologic interventions specific for the ethnic/racial population of the child and family they are serving
- Identify ethnopharmacologic factors (pharmacogenomic, dietary, use of herbal cures) that may influence the child's response to medications or experience of side effects

Trauma-informed care

Along with striving to attain cultural competence in clinical practice and service delivery, the NCTSN strongly supports a "trauma-informed child and family service system where all parties involved recognize and respond to the impact of traumatic stress on those who have contact with the system, including children, caregivers, and service providers."[110]

A trauma-informed child and family system calls for facilities and providers to:[110]

- Routinely screen for trauma exposure and related symptoms
- Use evidence-based, culturally responsive assessment and treatment for traumatic stress and associated mental health symptoms
- Make resources available to children, families and providers on trauma exposure, impact and treatment
- Engage in efforts to strengthen the resilience and protective factors of children and families impacted by and vulnerable to trauma
- Address parent and caregiver trauma and its impact on the family system
- Emphasize continuity of care and collaboration across child-service systems
- Maintain an environment of care for staff who address and treat trauma
- Promote staff wellness

The above tenets are based on an understanding that trauma-informed facilities and providers:

- Build meaningful partnerships that create mutuality among children, families, caregivers and professionals at an individual and organizational level
- Address the intersections of trauma with culture, history, race, gender, location and language
- Acknowledge the compounding impact of structural and systemic inequality
- Respond to the unique needs of diverse communities

Crisis planning and intervention

Managing crises for children and adolescents involves providing timely or immediate support for families and caregivers through integrated care coordination along with other targeted services, i.e., respite care, preventive behavioral supports, crisis prevention and stabilization, as warranted by the



nature of the situation.[72] An expert panel convened by SAMHSA developed the seminal work, *Practice Guidelines: Core Elements in Responding to Mental Health Crisis* (2009). These guidelines acknowledge the reality that "adults, children and older adults with a serious mental illness or emotional disorder often lead lives characterized by recurrent, significant crises" which are "not the inevitable consequences of mental disability, but rather represent the combined impact of a host of additional factors, including lack of access to essential services and supports, poverty, unstable housing, coexisting substance use, other health problems, discrimination and victimization."[111]

While crises can affect any youth with a MEB disorder, they must be anticipated for those who: [72][112]

- 1. Are diagnosed with serious mental illness (e.g., schizophrenia, bipolar disorder, major depression)
- 2. Have co-occurring IDD
- 3. Have a history of aggression and are likely to be admitted to residential treatment (e.g., disruptive, impulse-control and conduct disorders, ADHD)

To that end, the SAMHSA guidelines delineate a framework for organizations (e.g., police departments, hospitals, mental health clinics, schools and foster care placement agencies) to develop crisis protocols and evaluate current policies and procedures for adequacy. Specifically, the SAMHSA guidelines promote consistency with recovery and resiliency principles and help transition an agency from taking "a reactive and cyclical approach to mental health crises to one that works towards reducing the likelihood of future emergencies and produces better outcomes" (p.4).[11]

In order to avoid harm and establish feelings of safety for youth experiencing a crisis, the SAMHSA guidelines indicate that it is beneficial to establish a "personal safety plan" in advance, i.e., where the child or adolescent is respected as a credible source to inform the caregivers of calming strategies that might best be helpful should a crisis occur. This strategy often allows the young person to experience an intervention done with them rather than to them. A negotiated personal safety plan is particularly germane to adolescents in residential treatment centers (RTCs).

The SAMHSA guidelines also underscore the importance of caregivers, law enforcement officers and other providers addressing the impact of trauma, as it relates to both the crisis event and the crisis response or intervention itself, to avoid imposing further trauma. The guidelines stipulate the need for professionals and organizations serving youth with serious mental illness and their families to review and consider whether the crisis is wholly or partly attributable to gaps or other problems in the individual's current plan of care. Therefore, post-event reviews may produce information that is helpful to the individual and his or her service providers in refining ongoing services and crisis plans (p.8).[111]

In order to meet the needs of a high-risk population, a healthcare system serving children and adolescents should include the following core crisis services along the continuum: [113]

- 1. 23-hour crisis stabilization or observation services
- 2. Short-term crisis residential services and crisis stabilization



- 3. Mobile crisis services
- 4. Round-the-clock crisis hotlines
- 5. Warm lines
- 6. Psychiatric advance directive statements
- 7. Peer crisis services

One of the most crucial recommendations from the SAMHSA guidelines is the precept that "individuals in a self-defined crisis are not turned away," that is, when agency or hospital criteria are not met for admission or receipt of further services, one should not inform the customer to "contact them again, if the situation worsens," since this may tacitly encourage the patient and family to escalate the crisis (p.9).[111] Therefore, it is incumbent upon providers to refer clients in impending crisis situations to alternative services (e.g., respite care to parents of children with IDD) and improve their outreach capabilities.[111][114]

Monitoring clinical, social and adaptive outcomes

Child welfare agencies, clinics and schools collaborate with mental health partners, using multiple informants to track the outcomes of psychosocial interventions for children and families, in order to monitor progress, modify interventions or goals, and improve service delivery. These are best tracked in a system so that various levels of analyses can be performed. In a truly comprehensive system, the outcome indicators and measures might include the following areas:[81][82]

- Psychosocial functioning
- School functioning
- Children with well child checks
- Placement stability/permanency
- Length of time in foster care
- Length of stay in inpatient and residential treatment
- Community tenure for older and transition age youth who have involvement with the juvenile justice system
- Patient safety
- Family satisfaction with services

Many of the scientifically validated tools used for ongoing assessment for mental health service needs (listed and described on page 24) are also applied in monitoring client progress, since the use of the same tools provides consistency of measurement of important domains. In addition, selecting appropriate areas to be measured and tracked over time is essential to monitoring beneficial changes in important and diverse outcomes. This is necessary even when evidence-based practices have been put in place.[115]



Conclusion

Magellan has built a comprehensive infrastructure with a solid clinical foundation, based on the research and EBP presented in this report, to implement its vision and philosophy of child and adolescent care and coordination designed to improve the life trajectory of youth with MEB disorders. Magellan's dedicated team of experts has developed and is enhancing child and adolescent service delivery systems that provide effective preventative services as well as needed acute and long-term treatment. Our SOC approach addresses the unique needs of each individual and embraces young people and their families as central to decision-making. Screening, planning and treatment are guided and driven by the individuals and their families. Their participation is central to ensuring voice and choice throughout the treatment process. Magellan offers a crisis continuum to ensure that crises are addressed in the moment and stability is maintained for both the child and the family. Our clinically driven care coordination model, eMbraceCare, employs a personalized approach including team-based treatment planning and the development of a personalized care coordination plan.

Magellan also focuses on the development of collaborative structures through cross-system agreement with other child-serving systems, e.g., child welfare, juvenile justice and education, incorporating trauma-informed care. We collaborate with national experts to produce new tools and advance best practices through our partnerships with:

- Building Bridges Initiative (BBI)
- Family Run Executive Director Leadership Association (FREDLA)
- National Federation of Families for Children's Mental Health (NFFCMH)
- National Wraparound Implementation Center (NWIC)
- Praed Foundation

Our care management model focuses on practice transformation at the provider level, ensuring that the network of providers treating young people fully supports the enhancement of the SOC to achieve positive outcomes for children and their families. Under this structure, we identify and prioritize developmentally appropriate and trauma-informed evidence-based practices and provide parent support and training to ensure active participation of the family in the treatment process. Other services provided by Magellan include crisis prevention and trauma awareness for parents, foster care providers, agencies and others who have significant relationships with children and adolescents.

Magellan has ensured that our network of providers treating young people with MEB disorders can fully support a SOC including the following:

- Preventive services and screening
- Early intervention and routine care provision
- Specialty consultation
- Treatment and coordination



• Intensive mental health services for complex clinical problems

Using evidence-based research, we focus on interventions to develop coping strategies, monitor the child's involvement with antisocial peers, ameliorate harsh parenting, strengthen protective factors and provide new opportunities for development. Priority interventions include:

- Application of trauma-informed care in all aspects of services
- Managing crises for children and adolescents by providing timely or immediate support for families and caregivers through integrated care coordination
- Establishing a personal safety plan in advance
- Appropriate and safe use of psychotropic medication
- Evidence-informed psychosocial treatment
- Parent and family engagement
- Youth empowerment and peer support
- Individualized educational interventions and skill development models
- Parent and caregiver training programs

It is through this infrastructure, philosophy and culture that Magellan confidently espouses a holistic service delivery system—one in which all sectors of the community are engaged in and supportive of the systems dedicated to the health, well-being and future of our nation's youth.



References

- [1] National Research Council and Institute of Medicine. (2009). Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities. Committee on the Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions. O'Connell, M. E., Boat, T. & Warner, K. E., Editors. Board on Children, Youth, and Families, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK32775/
- [2] Wagner, E. F. (2008). Developmentally informed research on the effectiveness of clinical trials: a primer for assessing how developmental issues may influence treatment responses among adolescents with alcohol use problems. *Pediatrics*, 121 Suppl 4, S337–S347. https://doi.org/10.1542/peds.2007-2243F
- [3] Zeanah, C. H., Shauffer, C., & Dozier, M. (2011). Foster care for young children: why it must be developmentally informed. *Journal of the American Academy of Child and Adolescent Psychiatry*, 50(12), 1199–1201. https://doi.org/10.1016/j.jaac.2011.08.001
- [4] Pires S. A. Building Systems of Care. A Primer. 2nd Edition (2010). National Technical Assistance Center for Children's Mental Health Center for Child Health and Mental Health Policy Georgetown University Child Development Center. Retrieved from https://gucchd.georgetown.edu/products/PRIMER2ndEd_FullVersion.pdf
- [5] American Psychological Association Resilience Guide for Parents and Teachers. Retrieved from https://www.apa.org/topics/resilience-guide-parents
- [6] Center on the Developing Child at Harvard University. (2007). A Science-Based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children. Retrieved from http://www.developingchild.harvard.edu
- [7] Cooper J. L., Banghart P., Aratani Y. (2010). National Center for Children in Poverty. Addressing the Mental Health Needs of Young Children in the Child Welfare System. What Every Policymaker Should Know. Retrieved from https://www.nccp.org/wp-content/uploads/2010/09/text 968.pdf
- [8] National Scientific Council on the Developing Child. (2005/2014). Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper 3. Updated Edition. Retrieved from http://www.developingchild.harvard.edu



- [9] Jim Casey Youth Opportunities Initiative. (2011). The Adolescent Brain: New Research and Its Implications for Young People Transitioning From Foster Care, Executive Summary. Retrieved from www.jimcaseyyouth.org
- [10] What is child abuse and neglect? How does my state define child abuse and neglect? Retrieved from the Children's Bureau, An Office of the Administration for Children & Families: https://www.acf.hhs.gov/cb/faq/can1
- [11] Child Welfare Information Gateway. (2018). Parenting Children and Youth Who Have Experienced Abuse or Neglect. Washington, DC: U.S. Department of Health and Human Services, Children's Bureau. Retrieved from https://www.childwelfare.gov/pubPDFs/parenting_CAN.pdf
- [12] Child Welfare Information Gateway. (2006). Child Neglect: A Guide for Prevention, Assessment, and Intervention. Washington, DC: U.S. Department of Health and Human Services, Children's Bureau. Retrieved from www.childwelfare.gov/pubs/usermanual.cfm
- [13] Child Welfare Information Gateway. (2014). Parenting a Child Who Has Experienced Trauma. Washington, DC: U.S. Department of Health and Human Services, Children's Bureau. Retrieved from https://www.childwelfare.gov/pubs/factsheets/child-trauma/
- [14] Zero to Six Collaborative Group, National Child Traumatic Stress Network. (2010). Early childhood trauma. Los Angeles, CA & Durham, NC: National Center for Child Traumatic Stress. Retrieved from https://www.nctsn.org/sites/default/files/resources/early_childhood_trauma.pdf
- [15] *Trauma Types*. Retrieved from The National Child Traumatic Stress Network: https://www.nctsn.org/what-is-child-trauma/trauma-types
- [16] Policy Briefing Sheet APA Public Interest Government Relations Office. Trauma and PTSD in Children and Adolescents. Retrieved from www.apa.org/pi/families/resources/fact-sheet.pdf
- [17] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596
- [18] APA Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents. (2008). Children and Trauma: Update for Mental Health Professionals. American Psychological Association. Retrieved from www.apa.org/pi/families/resources/childrentrauma.pdf
- [19] American Psychological Association. (2009). Children and Trauma: Tips for Mental Health Professionals. Retrieved from https://www.apa.org/pi/families/resources/children-trauma-tips



- [20] Schmid, M., Petermann, F., Fegert, J. M. (2013) Developmental trauma disorder: pros and cons of including formal criteria in the psychiatric diagnostic systems. *BMC Psychiatry*, *13*(3), doi:10.1186/1471-244X-13-3. Retrieved from https://bmcpsychiatry.biomedcentral.com/articles/10.1186/1471-244X-13-3
- [21] Stanton, K. J., Denietolis, B., Goodwin, B. J., & Dvir, Y. (2020). Childhood Trauma and Psychosis: An Updated Review. *Child and adolescent psychiatric clinics of North America*, *29*(1), 115–129. https://doi.org/10.1016/j.chc.2019.08.004
- [22] Rosenthal, A., Meyer, M. S., Mayo, D., Tully, L. M., Patel, P., Ashby, S., Titone, M., Carter, C. S., & Niendam, T. A. (2020). Contributions of childhood trauma and atypical development to increased clinical symptoms and poor functioning in recent onset psychosis. *Early intervention in psychiatry*, 14(6), 755–761. https://doi.org/10.1111/eip.12931
- [23] Leve, L. D., Harold, G. T., Chamberlain, P., Landsverk, J. A., Fisher, P. A., & Vostanis, P. (2012). Practitioner review: Children in foster care--vulnerabilities and evidence-based interventions that promote resilience processes. *Journal of child psychology and psychiatry, and allied disciplines*, 53(12), 1197–1211. https://doi.org/10.1111/j.1469-7610.2012.02594.x
- [24] Jones, R., Everson-Hock, E. S., Papaioannou, D., Guillaume, L., Goyder, E., Chilcott, J., Cooke, J., Payne, N., Duenas, A., Sheppard, L. M., & Swann, C. (2011). Factors associated with outcomes for looked-after children and young people: a correlates review of the literature. *Child: care, health and development, 37*(5), 613–622. https://doi.org/10.1111/j.1365-2214.2011.01226.x
- [25] Kinship Care. Retrieved from The Annie E. Casey Foundation: https://www.aecf.org/topics/kinship-care/
- [26] Children in kinship care in the United States. Retrieved from The Annie E. Casey Foundation Kids Count Data Center: https://datacenter.kidscount.org/data/tables/10454-children-in-kinship-care#detailed/1/any/false/1687,1652,1564,1491,1443,1218,1049,995/any/20158,20159
- [27] The Annie E. Casey Foundation. (2012). Stepping Up for Kids: What Government and Communities Should Do to Support Kinship Families. Baltimore, MD. Retrieved from https://www.aecf.org/resources/stepping-up-for-kids/
- [28] Zou, R., Tiemeier, H., van der Ende, J., Verhulst, F. C., Muetzel, R. L., White, T., Hillegers, M., & El Marroun, H. (2019). Exposure to Maternal Depressive Symptoms in Fetal Life or Childhood and Offspring Brain Development: A Population-Based Imaging Study. *The American Journal of Psychiatry*, 176(9), 702–710. https://doi.org/10.1176/appi.ajp.2019.18080970
- [29] American Academy of Child & Adolescent Psychiatry. (2008). Children of Parents with Mental Illness. Facts for Families. No. 39. Retrieved from https://www.aacap.org/App Themes/AACAP/docs/facts for families/39 children of parents with mental illness.pdf



- [30] Wesseldijk, L. W., Dieleman, G. C., van Steensel, F., Bleijenberg, E. J., Bartels, M., Bögels, S. M., & Middeldorp, C. M. (2018). Do Parental Psychiatric Symptoms Predict Outcome in Children With Psychiatric Disorders? A Naturalistic Clinical Study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 57(9), 669–677.e6. https://doi.org/10.1016/j.jaac.2018.05.017
- [31] Evans, J. & Fowler, R. (2008). Supporting children in families affected by mental illness.

 Retrieved from

 https://www.researchgate.net/publication/242696030 Supporting children in families affect ed by mental illness
- [32] National Abandoned Infants Assistance Resource Center. (2012). Supporting Children of Parents with Co-occurring Mental Illness and Substance Abuse. Retrieved from http://centerforchildwelfare.org/kb/mentalhealth/SupportingChildrenofParentsWithSAMH.pdf
- [33] Ranning, A., Laursen, T. M., Thorup, A., Hjorthøj, C., Nordentoft, M. (2016). Children of Parents With Serious Mental Illness: With Whom Do They Grow Up? A Prospective, Population-Based Study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 55(11), 953-961. Retrieved from https://www.jaacap.org/article/S0890-8567(16)31223-0/fulltext
- [34] Lander, L., Howsare, J., & Byrne, M. (2013). The impact of substance use disorders on families and children: from theory to practice. *Social work in public health*, *28*(3-4), 194–205. https://doi.org/10.1080/19371918.2013.759005
- [35] Child Welfare Information Gateway. (2006). Parental Substance Use and the Child Welfare System. Washington, DC: U.S. Department of Health and Human Services, Children's Bureau. Retrieved from https://www.childwelfare.gov/pubPDFs/parentalsubabuse.pdf
- [36] The National Resource Center on Children and Families of the Incarcerated. Retrieved from Rutgers University Camden: https://nrccfi.camden.rutgers.edu/
- [37] Travis, J. (2005). But They All Come Back: Facing the Challenges of Prisoner Reentry. Washington DC: The Urban Institute Press: ISBN 0-87766-750-0. (2006). *Journal of Urban Health: Bulletin of the New York Academy of Medicine, 83*(3), 370–371. https://doi.org/10.1007/s11524-006-9046-5
- [38] The Federal Interagency Working Group for Children of Incarcerated Parents. (2013). Promoting Social and Emotional Well-Being for Children of incarcerated Parents. Retrieved from http://accipp.org/wp-content/uploads/2016/02/Promoting-Social-and-Emotional-Well-Being-for-Children-of-Incarcerated-Parents.pdf
- [39] Substance Abuse and Mental Health Services Administration. (2011). Interventions for Disruptive Behavior Disorders: How to Use the Evidence-Based Practices KITs. HHS Pub. No. SMA-11-4634, Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental



- Health Services Administration, U.S. Department of Health and Human Services. Retrieved from https://store.samhsa.gov/sites/default/files/d7/priv/sma11-4634-howtouseebpkits-idbd.pdf
- [40] American Academy of Child & Adolescent Psychiatry. (2019). Children with Oppositional Defiant Disorder. Facts for Families. No 72. Retrieved from https://www.aacap.org/AACAP/Families and Youth/Facts for Families/FFF-Guide/Children-With-Oppositional-Defiant-Disorder-072.aspx
- [41] American Academy of Child & Adolescent Psychiatry. (2018). Conduct Disorder. Facts for Families. No 33. Retrieved from https://www.aacap.org/AACAP/Families and Youth/Facts for Families/FFF-Guide/Conduct-Disorder-033.aspx
- [42] Harvard Health Publishing. (2011). Options for managing conduct disorder. *Harvard Mental Health Letter*, 27(9). Retrieved from https://www.health.harvard.edu/newsletter article/options-for-managing-conduct-disorder
- [43] Dodge, K. A., & McCourt, S. N. (2010). Translating models of antisocial behavioral development into efficacious intervention policy to prevent adolescent violence. Developmental psychobiology, 52(3), 277–285. https://doi.org/10.1002/dev.20440
- [44] American Academy of Child and Adolescent Psychiatry. (2007). Practice Parameter for the Assessment and Treatment of Children and Adolescents With Anxiety Disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 46*:2. Retrieved from https://www.aacap.org/App Themes/AACAP/docs/practice_parameters/JAACAP_Anxiety_2007.pdf
- [45] Salum, G. A., Desousa, D. A., do Rosário, M. C., Pine, D. S., & Manfro, G. G. (2013). Pediatric anxiety disorders: from neuroscience to evidence-based clinical practice. *Revista brasileira de psiquiatria (Sao Paulo, Brazil : 1999), 35 Suppl 1*, S03–S21. https://doi.org/10.1590/1516-4446-2013-S108
- [46] American Psychological Association. (2013). Neuropsychological Assessment and Intervention for Youth: An Evidence-Based Approach to Emotional and Behavioral Disorders. Reddy L. A., Weissman A. S., Hale J. B., Editors. Retrieved from https://www.apa.org/pubs/books/4316149
- [47] Birmaher, B., Brent, D., AACAP Work Group on Quality Issues, Bernet, W., Bukstein, O., Walter, H., Benson, R. S., Chrisman, A., Farchione, T., Greenhill, L., Hamilton, J., Keable, H., Kinlan, J., Schoettle, U., Stock, S., Ptakowski, K. K., & Medicus, J. (2007). Practice parameter for the assessment and treatment of children and adolescents with depressive disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 46(11), 1503–1526. https://doi.org/10.1097/chi.0b013e318145ae1c



- [48] American Academy of Child & Adolescent Psychiatry. (2013). The Depressed Child. Facts for Families. No. 4. Retrieved from https://www.aacap.org/App Themes/AACAP/docs/facts for families/04 the depressed child. pdf
- [49] Thapar, A., Collishaw, S., Pine, D. S., & Thapar, A. K. (2012). Depression in adolescence. *Lancet (London, England)*, 379(9820), 1056–1067. https://doi.org/10.1016/S0140-6736(11)60871-4
- [50] Moreno, C., Laje, G., Blanco, C., Jiang, H., Schmidt, A. B., & Olfson, M. (2007). National trends in the outpatient diagnosis and treatment of bipolar disorder in youth. *Archives of general psychiatry*, *64*(9), 1032–1039. https://doi.org/10.1001/archpsyc.64.9.1032
- [51] NIMH Perspective on Diagnosis and Treating Bipolar Disorder in Children. (2007). Press Release
- [52] American Academy of Child & Adolescent Psychiatry. (2015). Bipolar Disorder in Children and Teens. Facts for Families, No 38. Retrieved from https://www.aacap.org/AACAP/Families and Youth/Facts for Families/FFF-Guide/Bipolar-Disorder-In-Children-And-Teens-038.aspx
- [53] Cosgrove, V. E., Roybal, D., & Chang, K. D. (2013). Bipolar depression in pediatric populations: epidemiology and management. *Pediatric drugs*, *15*(2), 83–91. https://doi.org/10.1007/s40272-013-0022-8
- [54] Cooper, J. L., Masi, R. (2007). Child and Youth Emergency Mental Health Care: A National Problem. *Unclaimed children Revisited. Issue Brief,* No. 1. National Center for Children in Poverty. Retrieved from https://academiccommons.columbia.edu/doi/10.7916/D89S20RC/download
- [55] Leading Causes of Death and Injury. Retrieved from the Centers for Disease Control and Prevention: https://www.cdc.gov/injury/wisqars/LeadingCauses.html
- [56] Czeisler, M. É., Lane, R. I., Petrosky, E., et al. (2020). Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic—United States, June 24–30, 2020. Morbidity and Mortality Weekly Report (MMWR), 69(32), 1049–1057.
 DOI: http://dx.doi.org/10.15585/mmwr.mm6932a1
- [57] Sher, L. (2012). Teaching medical professionals and trainees about adolescent suicide prevention: five key problems. *International journal of adolescent medicine and health, 24*(2), 121–123. https://doi.org/10.1515/ijamh.2012.018
- [58] Ivey-Stephenson, A. Z., Demissie, Z., Crosby, A. E., et al. (2019). Suicidal Ideation and Behaviors Among High School Students Youth Risk Behavior Survey, United States. MMWR Suppl 2020;69(Suppl-1):47–55. DOI: http://dx.doi.org/10.15585/mmwr.su6901a6external



- [59] U.S. Department of Health and Human Services (HHS) Office of the Surgeon General and National Action Alliance for Suicide Prevention. (2012). 2012 National Strategy for Suicide Prevention: Goals and Objectives for Action. Washington, DC: HHS, September 2012. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK109917/
- [60] Pinzon, J. L., Jones, V. F., Committee on Adolescence, & Committee on Early Childhood (2012). Care of adolescent parents and their children. *Pediatrics, 130*(6), e1743–e1756. https://doi.org/10.1542/peds.2012-2879
- [61] American Academy of Child & Adolescent Psychiatry. (2012). When Children have Children.

 Facts for Families. No. 31. Retrieved from

 https://www.aacap.org/App Themes/AACAP/docs/facts for families/31 when children have children.pdf
- [62] American Academy of Child & Adolescent Psychiatry. (2018). Teens: Alcohol and Other Drugs. Facts for Families. No. 3. Retrieved from https://www.aacap.org/AACAP/Families and Youth/Facts for Families/FFF-Guide/Teens-Alcohol-And-Other-Drugs-003.aspx
- [63] American Academy of Child & Adolescent Psychiatry. (2019). Marijuana and Teens. Facts for Families. No. 106. Retrieved from https://www.aacap.org/AACAP/Families and Youth/Facts for Families/FFF-Guide/Marijuana-and-Teens-106.aspx
- [64] Bukstein, O. G., Bernet, W., Arnold, V., Beitchman, J., Shaw, J., Benson, R. S., Kinlan, J., McClellan, J., Stock, S., Ptakowski, K. K., & Work Group on Quality Issues (2005). Practice parameter for the assessment and treatment of children and adolescents with substance use disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 44(6), 609–621. https://doi.org/10.1097/01.chi.0000159135.33706.37
- [65] American Academy of Child and Adolescent Psychiatry. (2003). AACAP/CWLA Policy Statement on Use of Alcohol/Drugs, Screening/Assessment of Children in Foster Care. Retrieved from https://www.aacap.org/aacap/policy statements/2003/Mental Health and Use of Alcohol a nd Other Drugs Screening and Assessment of Children in Foster Care.aspx
- [66] U.S. Department of Health and Human Services National Institutes of Health. (2003). Preventing Drug Use among Children and Adolescents, A Research-Based Guide for Parents, Educators, and Community Leaders. Second Edition. Retrieved from https://www.drugabuse.gov/sites/default/files/preventingdruguse-2.pdf
- [67] Johnston, L. D., Miech, R. A., O'Malley, P. M., Bachman, J. G., Schulenberg, J. E., & Patrick, M. E. (2020). Monitoring the Future national survey results on drug use 1975-2019: Overview, key findings on adolescent drug use. Ann Arbor: Institute for Social Research, University of Michigan. Retrieved from



- https://cdn.ymaws.com/www.fadaa.org/resource/resmgr/files/resource_center/mtf-overview2019.pdf
- [68] American Society of Addiction Medicine. (2020). Public Policy Statement on E-Cigarettes. Retrieved from https://www.asam.org/advocacy/find-a-policy-statement/view-policy-statement/public-policy-statements/2020/04/01/e-cigarettes
- [69] Glantz, S. A., & Bareham, D. W. (2018). E-Cigarettes: Use, Effects on Smoking, Risks, and Policy Implications. *Annual review of public health, 39*, 215–235. https://doi.org/10.1146/annurev-publhealth-040617-013757
- [70] American Society of Addiction Medicine. (2012). White Paper on State-Level Proposals to Legalize Marijuana. Retrieved from https://www.asam.org/docs/default-source/public-policy-statements/state-level-proposals-to-legalize-marijuana-final2773DD668C2D.pdf?sfvrsn=e6c7ad4 2
- [71] American Society of Addiction Medicine. (2018). Public Policy Statement on Prevention. Retrieved from https://www.asam.org/docs/default-source/public-policy-statements/prevention.pdf?sfvrsn=e80647c2 4#search=%22alcohol%20youth%22
- [72] NADD. (2013). Including Individuals with Intellectual/ Developmental Disabilities and Co-Occurring Mental Illness: Challenges that Must Be Addressed in Health Care Reform. *Position Paper*. Retrieved from http://thenadd.org/wp-content/uploads/2013/10/NADD-Poisition-Statement-on-letterhead1.pdf
- [73] Aggarwal, R., Guanci, N., Appareddy, V. L. (2014). Issues in Treating Patients with Intellectual Disabilities. *Psychiatric Times*, *30*(8). Retrieved from https://www.psychiatrictimes.com/view/issues-treating-patients-intellectual-disabilities
- [74] Kwok, H., & Cheung, P. W. (2007). Co-morbidity of psychiatric disorder and medical illness in people with intellectual disabilities. *Current opinion in psychiatry*, *20*(5), 443–449. https://doi.org/10.1097/YCO.0b013e3282ab9941
- [75] American Psychiatric Association. (2014). The American Psychiatric Publishing Textbook of Psychiatry, Sixth Edition. Hales, R. E., Yudofsky, S. C., Roberts L. W., Editors. Washington DC, American Psychiatric Publishing. Retrieved from https://www.appi.org/American Psychiatric Association Publishing Textbook of Neuropsychiatry and Clinical Neurosciences Sixth Edition
- [76] Barnhill, J., McNelis, D. (2012). Overview of Intellectual/Developmental Disabilities. *Focus The Journal of Lifelong Learning in Psychiatry*, 10(3). Retrieved from https://focus.psychiatryonline.org/doi/abs/10.1176/appi.focus.10.3.300



- [77] Edelsohn, G. A., Schuster, J. M., Castelnovo, K., Terhorst, L., & Parthasarathy, M. (2014). Psychotropic prescribing for persons with intellectual disabilities and other psychiatric disorders. *Psychiatric services (Washington, D.C.), 65*(2), 201–207. https://doi.org/10.1176/appi.ps.201300029
- [78] American Academy of Child and Adolescent Psychiatry. (2009). Improving Mental Health Services in Primary Care: Reducing Administrative and Financial Barriers to Access and Collaboration. Committee on Health Care Access and Economics Task Force on Mental Health. *Pediatrics*, 123(4) 1248-1251; DOI: 10.1542/peds.2009-0048. Retrieved from https://pediatrics.aappublications.org/content/pediatrics/123/4/1248.full.pdf
- [79] Martini, R., Houston, M., Chenven, M. et al. for the Taskforce on Healthcare Delivery Systems. (2013). American Academy of Child and Adolescent Psychiatry. ACOs and CAPs: Preparing for the Impact of Healthcare Reform on Child and Adolescent Psychiatry Practice. Retrieved from https://www.aacap.org/App Themes/AACAP/docs/Advocacy/policy resources/preparing for healthcare reform 201303.pdf
- [80] Martini, R., Hilt, R., Marx, L. et al. (2012). American Academy of Child and Adolescent Psychiatry. Best Principles for Integration of Child Psychiatry into the Pediatric Health Home. Retrieved from https://www.aacap.org/App Themes/AACAP/docs/clinical practice center/systems of care/best principles for integration of child psychiatry into the pediatric health home 2012.pdf
- [81] Romanelli, L. H., LaBarrie, T. L., Sabnani, S., Jensen, P. S., & Child Welfare-Mental Health Best Practices Group. (2009). Mental Health Practices in Child Welfare Guidelines Toolkit. Retrieved from http://centerforchildwelfare.fmhi.usf.edu/kb/mentalhealth/MentalHealthPractices%5B1%5D.pdf
- [82] Romanelli, L. H., Landsverk, J., Levitt, J. M., Leslie, L. K., Hurley, M. M., Bellonci, C., Gries, L. T., Pecora, P. J., Jensen, P. S., & Child Welfare-Mental Health Best Practices Group. (2009). Best practices for mental health in child welfare: screening, assessment, and treatment guidelines. *Child welfare*, 88(1), 163–188. Retrieved from https://pubmed.ncbi.nlm.nih.gov/19653458/
- [83] Child Welfare Information Gateway (2017). Supporting brain development in traumatized children and youth. Washington, DC: U.S. Department of Health and Human Services, Children's Bureau. Retrieved from https://www.childwelfare.gov/pubPDFs/braindevtrauma.pdf
- [84] ASQ:SE-2. Retrieved from ASQ Ages & Stages Questionnaires: https://agesandstages.com/products-pricing/asqse-2/
- [85] Johnson, C. P., Myers, S. M., & American Academy of Pediatrics Council on Children With Disabilities. (2010). Identification and evaluation of children with autism spectrum



- disorders. *Pediatrics*, *120*(5), 1183–1215. https://doi.org/10.1542/peds.2007-2361 https://pediatrics.aappublications.org/content/126/6/e1622
- [86] Moon, M., & Committee on Bioethics. (2012). Institutional Ethics Committees. *Pediatrics, 143*(5). DOI: https://doi.org/10.1542/peds.2019-0659
- [87] American Academy of Pediatrics. (2010). Mental Health Screening and Assessment Tools for Primary Care. Retrieved from https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Mental-Health/Documents/MH ScreeningChart.pdf
- [88] Magellan Health. (2017). Appropriate Use of Psychotropic Drugs in Children and Adolescents: A Clinical Monograph Important Issues and Evidence-Based Treatments. Retrieved from https://www.magellanhealthcare.com/medicaid-and-medicare/behavioral-health-management/childrens-services/childrens-models/
- [89] American Academy of Child and Adolescent Psychiatry. (2014). Psychotherapy as a Core Competence of Child and Adolescent Psychiatrist. *Policy Statement*. Retrieved from https://www.aacap.org/AACAP/Policy Statements/2014/Psychotherapy as a Core Competence of Child and Adolescent Psychiatrist.aspx
- [90] de Arellano, M. A., Lyman, D. R., Jobe-Shields, L., George, P., Dougherty, R. H., Daniels, A. S., Ghose, S. S., Huang, L., & Delphin-Rittmon, M. E. (2014). Trauma-focused cognitive-behavioral therapy for children and adolescents: assessing the evidence. *Psychiatric services (Washington, D.C.)*, 65(5), 591–602. https://doi.org/10.1176/appi.ps.201300255
- [91] Claes, C., Van Hove, G., Vandevelde, S., van Loon, J., & Schalock, R. L. (2010). Person-centered planning: analysis of research and effectiveness. *Intellectual and developmental disabilities*, 48(6), 432–453. https://doi.org/10.1352/1934-9556-48.6.432
- [92] Sebastian, C. S. (2013). Pediatric Mental Retardation: What it is and what it is not
- [93] Huey, S. J., Jr, & Polo, A. J. (2008). Evidence-based psychosocial treatments for ethnic minority youth. *Journal of clinical child and adolescent psychology: the official journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53, 37*(1), 262–301. https://doi.org/10.1080/15374410701820174
- [94] Cohen, J. A., Bukstein, O., Walter, H., Benson, S. R., Chrisman, A., Farchione, T. R., Hamilton, J., Keable, H., Kinlan, J., Schoettle, U., Siegel, M., Stock, S., Medicus, J., & AACAP Work Group On Quality Issues. (2010). Practice parameter for the assessment and treatment of children and adolescents with posttraumatic stress disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 49(4), 414–430. Retrieved from https://pubmed.ncbi.nlm.nih.gov/20410735/



- [95] Dillenburger, K. (2012). Why reinvent the wheel? A behaviour analyst's reflections on pedagogy for inclusion for students with intellectual and developmental disability. *Journal of intellectual & developmental disability*, 37(2), 169–180. https://doi.org/10.3109/13668250.2012.685705
- [96] Gabbard's Treatments of Psychiatric Disorders, Fifth Edition. (2014). Gabbard, G. O., Editor, Washington DC, American Psychiatric Publishing. Retrieved from https://psychiatryonline.org/doi/book/10.1176/appi.books.9781585625048
- [97] Volkmar, F., Siegel, M., Woodbury-Smith, M., King, B., McCracken, J., State, M., & the American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). (2014). Practice Parameter for the Assessment and Treatment of Children and Adolescents with Autism Spectrum Disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 53(2), P237-257. DOI: https://doi.org/10.1016/j.jaac.2013.10.013
- [98] McCauley, E., Berk, M. S., Asarnow, J. R., Adrian, M., Cohen, J., Korslund, K., Avina, C., Hughes, J., Harned, M., Gallop, R., Linehan, M. M. (2018). Efficacy of Dialectical Behavior Therapy for Adolescents at High Risk for Suicide: A Randomized Clinical Trial. *JAMA Psychiatry*, 75(8): 777-785 (ISSN: 2168-6238). Retrieved from https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2685324
- [99] Substance Abuse and Mental Health Services Administration. (2009). Family Psychoeducation: The Evidence. HHS Pub. No. SMA-09-4422, Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Retrieved from https://store.samhsa.gov/sites/default/files/d7/priv/theevidence-fp-0.pdf
- [100] Walkup, J., & Work Group on Quality Issues. (2009). Practice parameter on the use of psychotropic medication in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 48(9), 961–973. https://doi.org/10.1097/CHI.0b013e3181ae0a08
- [101] Tufts Clinical and Translational Science Institute. (2010). Multi-State Study on Psychotropic Medication Oversight in Foster Care. Retrieved from <a href="https://www.tuftsmedicalcenter.org/-/media/Brochures/TuftsMC/Research-Clinical-Trials/Institute-for-Clinical-Research-and-Health-Policy-Studies/Executive Report 090710 348.ashx?la=en&hash=83E0F329BBDEC730399870831B5845D528EE9469
- [102] Stroul, B. A., & Friedman, R. M. (2011). Effective strategies for expanding the system of care approach. A report on the study of strategies for expanding systems of care. Atlanta, GA: ICF Macro. Retrieved from https://gucchd.georgetown.edu/products/SOC%20Expansion%20Study%20Report%20Final.pdf
- [103] American Academy of Child and Adolescent Psychiatry. (2019). Systems-Based Practice Family-Driven, Youth- Guided Care. Retrieved from



- https://www.aacap.org/App Themes/AACAP/docs/resources for primary care/training toolkit for systems based practice/Family-Module-August-2019-Trainee-Version-Questions-Only-(8.15.19).pdf
- [104] First 5 LA. (2010). Growing and Sustaining Parent Engagement. A Toolkit for Parents and Community Partners. Retrieved from https://cssp.org/wp-content/uploads/2018/10/growingandsustainingparentengagementtoolkit.pdf
- [105] Research and Training Center on Family Support and Children's Mental Health. (2009). Youth Empowerment and Participation in Mental Health Care. Focal Point Research, Policy and Practice in Children's Mental Health, 23(2). Retrieved from https://www.pathwaysrtc.pdx.edu/pdf/fpS09.pdf
- [106] Branch, A. Y. (2002). Faith and Action: Implementation of the National Faith-Based Initiative for High-Risk Youth. Public/Private Ventures, Philadelphia, PA.; Branch Associates, Inc., Philadelphia, PA. Retrieved from https://eric.ed.gov/?id=ED471679
- [107] Bauldry, S. (2006). Positive Support: Mentoring and Depression Among High-Risk Youth. Public/Private Ventures. Retrieved from https://www.issuelab.org/resources/557/557.pdf
- [108] Kovacs, M., & Lopez-Duran, N. L. (2012). Contextual emotion regulation therapy: a developmentally based intervention for pediatric depression. *Child and adolescent psychiatric clinics of North America*, *21*(2), 327–ix. https://doi.org/10.1016/j.chc.2012.01.002
- [109] Pumariega, A. J., Rothe, E., Mian, A., Carlisle, L., Toppelberg, C., Harris, T., Gogineni, R. R., Webb, S., Smith, J., & American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues (CQI). (2013). Practice parameter for cultural competence in child and adolescent psychiatric practice. *Journal of the American Academy of Child and Adolescent Psychiatry*, 52(10), 1101–1115. https://doi.org/10.1016/j.jaac.2013.06.019
- [110] *Creating Trauma-Informed Systems*. Retrieved from The National Child Traumatic Stress

 Network: https://www.nctsn.org/trauma-informed-systems
- [111] Substance Abuse and Mental Health Services Administration. (2009). Practice Guidelines: Core Elements for Responding to Mental Health Crises. HHS Pub No. SMA-09-4427, Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Retrieved from https://store.samhsa.gov/product/Core-Elements-for-Responding-to-Mental-Health-Crises/sma09-4427
- [112] Miller, L., Riddle, M. A., Pruitt, D., Zachik, A., & dosReis, S. (2013). Antipsychotic treatment patterns and aggressive behavior among adolescents in residential facilities. *The journal of behavioral health services & research, 40*(1), 97–110. https://doi.org/10.1007/s11414-012-9314-y



- [113] Substance Abuse and Mental Health Services Administration. Crisis Services: Effectiveness Cost-Effectiveness, and Funding Strategies. HHS Publication No. (SMA)-14-4848. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014. Retrieved from https://store.samhsa.gov/product/Crisis-Services-Effectiveness-Cost-Effectiveness-and-Funding-Strategies/sma14-4848
- [114] Pollack, H. A. (2011). Health policy and the community safety net for individuals with intellectual disability. *Developmental disabilities research reviews, 17*(1), 44–51. https://doi.org/10.1002/ddrr.138
- [115] Lieberman, R., Zubritsky, C., Martinez, K., Massey, O., Fisher, S., Kramer, T., Koch, R., & Obrochta, C. (2010). Issue brief Using practice-based evidence to complement evidence-based practice in children 's behavioral health. Atlanta, GA: ICF Macro, Outcomes Roundtable for Children and Families. Retrieved from http://cfs.cbcs.usf.edu/docs/publications/OutcomesRoundtableBrief.pdf

