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

*Foundations of a Model*

Children's Services Work Group  
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# Introduction

Magellan Healthcare 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 while meeting 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).<sup>1</sup> 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 approach addresses each individual's unique needs, helping them to reach their potential of successfully living at home, achieving in school, participating in their communities, and entering adulthood. Magellan ensures that all children receive proper screening at the health plan and practice levels, using face-to-face evaluations as well as the use of nationally recognized standardized instruments to determine behavioral healthcare needs, physical healthcare needs and developmental milestones, and 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; and assessment and screening of protective factors of children in foster care. Other services include the provision of parent support and training to ensure both engagement and active participation of the youth and family in the treatment process, and crisis prevention and trauma awareness for parents, foster care providers, agencies and others having a significant relationship with the child or adolescent.

We are committed to a Children's Model Dashboard, 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 for the system. Dashboard categories include national and functional outcomes; clinical, developmental, and functional measures; consumer experience and accountability measures; and care coordination measures. Sources of data include screening in provider offices, information for providers, and claims data. The Children's Model Dashboard provides Magellan with data used to drive improvement initiatives in the care of children and adolescents at high risk.

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 ongoing expertise in the care for our members. 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. While Magellan acknowledges that more research exists for understanding the impact of critical and sensitive periods in brain development on motor and sensory functions, it 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 address vulnerabilities or potential developmental disruptions involving: 1) learning and memory, 2) attachment, 3) social relatedness, and 4) self-regulatory control, since these behaviors underlie cognitive and social competence or the achievement of developmental milestones. Magellan stresses the critical importance of enhancing young people's ability to achieve developmental competence along with a positive sense of self-esteem, mastery, well-being and social inclusion along with a strengthened ability to cope with adversity.<sup>1,2,3</sup>

Magellan emphasizes both patient risk factors and protective factors (i.e., patient strengths) in planning treatment and delineating patient outcomes.<sup>1,4</sup> These factors are manifest in different developmental periods (i.e., preconception and/prenatal, infancy, early childhood, middle childhood and adolescence) and appear in the individual as well as in the context of family, school and peers, and the neighborhood and community. By utilizing this construct, Magellan organizes service systems that strategically design and target interventions according to the child's specific developmental stage and unique risk/protective factors by attempting to do the following for each child: (p. 90)<sup>1</sup>

- 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., self-esteem, athletic ability, academics
- Providing for turning points to change the total milieu and provide new opportunities for development, e.g., moving from institutional care to an alternative program, 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 in the following situations: 1) as children of parents with substance abuse or mental health disorders, 2) as abused and neglected children, 3) as children in foster care, 4) as children whose parents are absent or incarcerated, and 5) as children exposed to violence, trauma and/or death of a parent. Consequently, Magellan prioritizes the prevention of child maltreatment, monitoring academic achievement, and addresses the needs of victims of violence. As a result, we prioritize the treatment of conduct problems, mood disorders, substance abuse, anxiety and multiple disorders including intellectual and developmental disabilities (p. 152).<sup>1</sup>

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, feelings of anxiety and uncertainty. Magellan further contends that a spirit of hope is essential to young people and their families who are served by our staff and providers so that they may develop skills for resiliency and optimal recovery.<sup>1,5</sup>

# 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).<sup>6</sup> 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, his/her social and emotional development and the emergence of new behavior and skills.<sup>6,7</sup>

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).<sup>6</sup> In addition, throughout childhood the effects of stress 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, natural disasters, when either accompanied by supportive parents/family or peers and social networks. However, *toxic stressors*, e.g., recurrent child abuse or neglect, severe maternal depression, parental substance abuse or family violence, do cause persistent elevations of stress hormones and altered levels of key brain chemicals, i.e., cortisol and adrenaline, that disrupt the developing brain and put children at high risk for developing MEB disorders and physical illness.<sup>6, 7, 8</sup>

Advances in neuroscience have also added new data to the understanding of adolescent development. Specifically, it is now known that the brain experiences a period of major development comparable to that of early childhood.<sup>9</sup> During adolescence 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 and 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).<sup>9</sup>

In light of above discussion, 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 trauma and/or maltreatment**

According to The National Child Traumatic Stress Network (NCTSN), children can be exposed to a range of traumatic experiences, with research indicating that young children, and even infants, may be affected by events that threaten their safety or the safety of their parents and caregivers.<sup>10, 11</sup> Trauma can be the result of victimization (e.g., child physical or sexual abuse), and/or domestic violence, or the result of natural disaster, 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 early childhood trauma occurring to very young children (0 – 6 years) has an even more profound effect on this cohort than is experienced by older children and adolescents. Their reaction to trauma is unique because of its profound effect on



the developing brain cortex, along with a very young child's concomitant shattered sense of safety, and fears/fantasies that their thoughts, wishes and fears may have power to become real. The most common traumatic stressors for young children include: 1) accidents, 2) physical trauma, 3) abuse, 4) neglect, and 5) exposure to domestic and community violence.<sup>10</sup>

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. However, in the new 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, and 4) disinhibited social engagement disorder. In addition, the latter two disorders have the 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 externalizing behavior.<sup>12</sup>

A report of the American Psychological Association Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents (2009) indicates that some children live with chronic trauma and “have no opportunity to heal between events” (p. 4).<sup>13</sup> The American Psychological Association (APA) emphasizes that “children exposed to chronic and pervasive trauma are especially vulnerable to the impact of subsequent trauma” (p. 5).<sup>13</sup> The APA Task Force 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. Along with developmental delays, these reactions can include the development of new fears, separation anxiety,

sleep disturbances, sadness, loss of interest in normal activities, numbing, reduced ability to concentrate, a decline in schoolwork performance, anger, somatic complaints, and irritability.<sup>14</sup>

The Children's Bureau has provided guidance and clarity that improves our understanding of the multifaceted and complicated issues that comprise child maltreatment. This federal agency indicates that as of 2010, the Federal Child Abuse Prevention and Treatment Act (CAPTA) defines maltreatment (i.e., child abuse and neglect) as “*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 harm*” (p. 3).<sup>15</sup> The Children's Bureau delineates the following categories of child maltreatment: 1) physical abuse—a non-accidental physical injury by a parent or other caregiver in the parenting role; 2) neglect—failure of the parent/ caregiver to provide for the child's basic needs—i.e., food, shelter supervision, medical care and emotional nurturing; 3) sexual abuse—forcing or coercing a child to engage in sexual activity and/or exploitation through pornography; and 4) emotional abuse—a pattern of behavior that hurts a child's emotional development, e.g., constant criticism, threats, withholding love.<sup>15</sup>

It is important to add that 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.<sup>16</sup> 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 attachment with primary caregivers, may exhibit a mistrust of others, an inability to understand the emotions

of others or regulate their own emotions, form/maintain relationships, feel remorse or empathy and have an impaired “social cognition”—i.e., an awareness of oneself in relation to others.<sup>15</sup>

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 trauma or developmental trauma). This was conceptualized as a problem wherein a series of related and repeated traumata (e.g., neglect, maltreatment and sexual abuse) was often committed secretly over long periods by persons close to the victim, e.g., intimate partner of parent/caregiver. 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):<sup>17</sup>

- **Infancy**—regulatory disorders
- **Preschool age**—attachment disorders with/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 to improve case identification and program planning across disciplines.

### **Children involved in child welfare systems**

International statistics suggest that an increasing number of children experience life in foster care.<sup>18</sup> Many children who are “looked-after” or 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% in the group. Entering foster care is also strongly associated with poverty and deprivation including 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.<sup>18, 19</sup> 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 annually, with approximately one in two of these children (50%) referred to live-in out-of-home care. The authors also noted evidence of widespread mental health problems in children in foster placement from the National Survey of Child and Adolescent Well-Being (NSCAW). Specifically, in this nationally representative sample of children and families (n=6,200) 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 – 24 year olds.<sup>18</sup>

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.<sup>18</sup> The older a child when first placed in foster care has also been shown to increase the likelihood of placement breakdown and behavioral problems.<sup>19</sup> 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.<sup>20</sup> 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. Kinship care may be informal, or a formal arrangement as is used in approximately 26% of children who remain under legal custody of the state requiring foster care. 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 placed 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 that they “experience fewer school disruptions than children in no-kin foster care” (p. 4).<sup>20</sup>

### **Children with parents who have mental health/substance use disorders**

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 drug abuse or depression. Further, the AACAP notes the equally important risks that stem from an inconsistent, unpredictable family environment that can contribute to psychiatric illness and developmental delays in children, along with the additional stress that mental illness places on a marriage and parenting abilities of the couple.<sup>21</sup> Thus, there is need for both children’s 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 (p.11).<sup>24</sup>

A Children’s Bureau Research to Practice Brief, *Supporting Children of Parents with Co-occurring Mental Illness and Substance Abuse (2012)*, identified the “trifecta of parental mental illness, substance abuse and domestic violence” in this population 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).<sup>22</sup> Children in this circumstance can experience isolation from peers, adults and possible supports. In addition, the parent with a mental illness and/or substance use disorder may be incapacitated at times, which will require the child to act as a parent at home in order to provide household tasks that are not age-appropriate, e.g., caring for a younger sibling, making meals, doing laundry and buying groceries.<sup>22, 23, 25</sup>

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.<sup>21, 23</sup> 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 specific interventional needs based on the eight stages of a family life cycle and corresponding family developmental tasks. As with a person’s individual growth and development, substance use disorders (SUDs), with or without concomitant MEBs, 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) insuring 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; and 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 (p. 4).<sup>23</sup> Therefore, the critical challenges facing our system of care/education for children with parents with mental illness require a sophisticated understanding of the myriad of problems (i.e., psychological, development, academic and relational) that need to be addressed in synchronization with the family’s needs and juncture in their life cycle.

## Children with absent/incarcerated parents

The U.S. has very high rates of incarceration, with estimates of a four-fold increase over the past generation, with some communities as high as three-quarters of the families having an absent father. There are experts in the criminal justice system who consider the U.S. to be in an era of “mass incarceration”...so that a collateral consequence of more imprisonments has meant that “by getting tough on crime, the U.S. has gotten tough on children” (p.35).<sup>26</sup> The loss of a parent to incarceration is a very traumatic event for a child that may result in negative consequences—including 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.<sup>26, 27</sup>

Children who have an absent parent due to incarceration experience a disruption of 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 both when visiting a parent in prison and later, when participating in the family reunification and prisoner reentry process. Strategies to improve outcomes for children during the prison term include: 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; and 4) working to facilitate a parent’s involvement in his/her child’s schooling where appropriate, despite the obstacles inherent in incarceration.<sup>27</sup> 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).<sup>26</sup>

## Children with disruptive behaviors, impulse control, 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 behavior disorders (DBDs) because of their seriousness and impact. Specifically, these disorders occur across the stages of child and youth development and have a significant effect on a child’s functioning across many social settings (e.g., home, school, community, etc.) and can involve multiple service sectors (e.g., mental health, education, child welfare, juvenile justice, etc.). As such, they can result in great social costs to communities when untreated.<sup>28</sup> These disorders are all characterized by problems in emotional and behavioral control, tend to have first onset in childhood or adolescence and are more common in males than females.<sup>12</sup> 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; and 6) antisocial personality disorder. Additionally, these disorders are considered “externalizing disorders” and exhibit personality dimensions of disinhibition and negative emotionality.<sup>12</sup>

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.<sup>12</sup> 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, and there may be other concomitant disorders present such as ADHD, learning disabilities, mood disorders and anxiety disorders.<sup>29</sup> 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).<sup>30</sup> 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 substance use disorders.<sup>31</sup> 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. Numerous studies show various early interventions can mitigate the development of the elements of antisocial personality disorder. Along with a pervasive pattern of disregard for, and violation of the rights of others, the individual possesses core features of deceit and manipulation and not infrequently, lack of remorse. The highest prevalence rates of this disorder are among the most severe samples of males with alcohol use disorder and from substance abuse clinics, prisons, and other forensic settings and higher in samples affected by adverse socioeconomic or sociocultural factors.<sup>12</sup> Recent clinical inquiry at Duke University has attempted to more fully understand the genetic/environmental 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 preventative efforts aimed at ameliorating early symptoms of conduct disorder and stopping the "pernicious persistence of antisocial behavior" (p. 277).<sup>32</sup> Specifically, the authors support interventions that harness theories developed from descriptive psychological studies as follows: 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; and 3) parenting behaviors, e.g., restrictiveness, monitoring and supervision can mute the impact of genetic predispositions of antisocial personality traits.<sup>32</sup> Magellan has designed specific interventions to address these factors.

## Children with depression and/or 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%.<sup>12, 33, 34</sup> 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.<sup>12</sup>

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 that 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: 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; and (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.<sup>34</sup> 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 part persists with strict or broad anxiety continuity (frequently accompanied by comorbid disorder), and about one-third remits from anxiety and develops a sequential heterotypic comorbidity (mainly with major depression and substance abuse)” (p. 54).<sup>34</sup> Magellan pays specific attention to focused interventions to treat anxiety and related disorders in childhood and early adolescence. Our experience has taught us that unless early interventions take place, more serious forms of pathology can develop such as panic disorder, psychosomatic disorders, and substance related disorders.

Magellan recognizes that untreated depression can often exacerbate other forms of pathology such as anxiety disorders, conduct 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.<sup>35</sup> 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 attentional, learning, conduct or anxiety disorders to be at higher risk for developing depression.<sup>36,37</sup> 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.<sup>36</sup> 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.<sup>38</sup> 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).<sup>35</sup>

A landmark epidemiological study by Marengo 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 an 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.<sup>39</sup> <sup>40</sup> In light of these issues, DSM-5 has addressed these concerns by defining 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.<sup>12</sup>

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).<sup>41</sup> When a child or adolescent is diagnosed with bipolar disorder, however, it is more common to see bipolar depression than mania or hypomania. Further, these depressive episodes can be debilitating, given the elevated levels of psychosocial disability, and potentially dangerous, because of high morbidity and increased serious risk of suicide in pediatric bipolar depression.<sup>42</sup> 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 mental health disorders and youth without mental health conditions.<sup>43</sup>



Youth suicide is a serious public health problem. According to the Centers for Disease Control and Prevention (CDC), for youth between the ages of 10 and 24, it is the third leading cause of death.<sup>44</sup> The AACAP *Teen Suicide Facts for Families* (2008) further reported suicide as the sixth leading cause of death for 5 to 14 year olds.<sup>45</sup> We have observed that 12% of elementary school students admit to suicidal ideas, threats or attempts. Regarding adolescent rates, there are four times as many female attempts compared to males, 326/100K females, 73/100k males; and depending on study, an average of 50 – 200 attempts per completed suicide in this population. Moreover, the rate of suicide among adolescents in the U.S. has tripled since the 1950s, where almost 16% of students in grades 9 to 12 report having seriously considered suicide, and 7.8% report having attempted suicide one or more times in the past 12 months.<sup>44,46</sup> 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 and equip stakeholders in recognizing “that suicide is a complicated issue that requires equally complex solutions”... and “where effective solutions need to incorporate multiple approaches at multiple levels” (p.6).<sup>47</sup> 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:<sup>47</sup>

- **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 they 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; and
- **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).<sup>46</sup>

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.<sup>48</sup> 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.<sup>48</sup> 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/responsibilities of parenting. Moreover, young parents are usually overwhelmed by guilt, anxiety and fears about

the future.<sup>49</sup> 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 where survey data reveal 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.<sup>48, 49</sup>

### Children with substance use disorder(s)

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* (2013) and *Marijuana and Teens Facts for Families* (2013) 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.<sup>50, 51</sup> Similarly, the historical AACAP Practice Parameter for the Assessment and Treatment of Children and Adolescents with Substance Use Disorders (2005) noted that 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/behaviors including the use of psychoactive substances. The AACAP parameter also indicated that while most adolescents experiment with alcohol and tobacco, some do advance to marijuana and a smaller portion go on to try other drugs.<sup>54</sup> The risk factors for developing substance use disorders (SUDs) include: 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 substance use disorders; 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; and 11) poverty.<sup>52, 53, 54</sup>

Although the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)* made substantive changes to Substance-Related and Addictive Disorders, it maintained the "essential feature of a substance use disorder" (SUD) to be "a cluster of cognitive, behavioral and physiological symptoms indicating that the individual continues using the substance despite significant related problems" (p. 483).<sup>12</sup> It is important to note that DSM-5 no longer separates diagnoses of *substance abuse and substance dependence* as in the prior edition, but establishes distinct substance use disorders for every category of drugs with criteria within overall groupings as follows: 1) impaired control; 2) social impairment; 3) risky use; and 4) pharmacological criteria. In addition, the criterion "recurrent legal problems" has been deleted and the criterion "craving or a strong desire or urge to use substance" has been added. Similarly, the diagnosis of *cannabis withdrawal* has been added to reflect scientific research validating this condition.<sup>12</sup>

The AACAP parameter indicated that "a hallmark of SUDs in adolescents is impairment in psychosocial and academic functioning" (p. 610).<sup>52</sup> 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).

The most recent National Survey Results on Drug Use 1975 – 2013, *Monitoring the Future*, was published by the University of Michigan Institute for Social Research. In this report, key findings on adolescent drug use were presented in order to detect age effects, secular trends and cohort effects in substance use and related attitudes/beliefs. Specifically, the report noted that in 2013, the annual prevalence of using any illicit drug increased in all three grades: by 1.5 percentage points in 8th grade(s), 1.6 percentage points in 10th (ns) and 0.6 percentage points in 12th (ns). For the three grades combined, the rate was up by 1.3 percentage points



in 2013. The report specified that these modest overall increases in the index of any illicit drug use are driven primarily by increases in marijuana use.<sup>55</sup> The report also noted *declining* usage of synthetic marijuana, inhalants, prescription Vicodin, salvia (hallucinogen) and usage rates *holding steady* for cocaine, LSD, amphetamines, MDMA, crack, methamphetamines, crystal methamphetamines, heroin, Rohypnol, Ketamine, sedatives, steroids, Adderall, Ritalin, Oxycontin and bath salts. Another important trend that surfaced in this analysis was the continued rapid and steep decline of tobacco use. However, the report confirmed the fact that alcohol remains the substance most widely used by today's teenagers, i.e., 68% of students have consumed alcohol by the end of high school and 28% have done so by 8th grade, wherein 52% of 12th graders and 12% of 8th graders in 2013 reported having been drunk at least once in their life.<sup>55</sup>

### **Children with multiple disorders including intellectual/developmental disorders**

Children and adolescents with co-occurring intellectual/developmental disabilities (IDD) and mental illness 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 the scope of the commission to include persons with intellectual disability. 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 (i.e., self-care, social, self-help, communication, education and occupational functioning).<sup>56, 57</sup> In addition, children with IDD often have multifaceted medical needs including epilepsy, gastro-esophageal reflux disorder (GERD),

sensory impairments, mobility problems and other metabolic or neurological conditions.<sup>58</sup> Further, monitoring a pharmacotherapeutic regimen and its medication effects is significantly more difficult to assess in this population because of impaired ability to verbalize symptoms relevant to diagnosis, measurement of treatment efficacy and detection of side effects.<sup>59</sup>

The National Association for Persons with Developmental Disabilities and Mental Health Needs (NADD) reported data, compiled in 2013, from state developmental disabilities (DD) agencies that showed this “special population” comprised approximately one-third (32.9%) of the total population receiving state disability services nationwide.<sup>56</sup> In a published clinical review of IDD, Barnhill et al. (2012) indicated that lifetime prevalence data suggest that between 20% and 70% of individuals with IDD either experience significant behavioral problems (e.g., aggression, self-injurious behavior, property destruction, pica, etc.) or meet criteria for a bona fide mental disorder.<sup>60</sup> Further, behavioral treatment records and pharmacy data analyzed by Edelson 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, oppositional defiant disorder and impulse control disorder.<sup>61</sup> 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.<sup>59</sup> In order to understand the epidemiology and natural history of IDD, the high prevalence rates of co-occurring mental illness have been linked to the following: 1) severity of intellectual disability; 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.<sup>60</sup>

It is acknowledged that practitioners who diagnose and treat individuals with IDD (with or without psychiatric comorbid conditions) face a number of challenges that need to be addressed. These include the lack of specific and specialized training for providers who must also deal with the accompanying stigma regarding these patients, biases related to the population, anxiety and intimidation when providing primary care, 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.<sup>57</sup>

## SECTION II

# Foundations of a Comprehensive Community Healthcare System Serving Youth

Magellan endorses a principle that has been promulgated by the Surgeon General of the United States (1999), among others, which supports improving the mental health of children in the U.S. and in transforming the mental health services system. “Without intervention, child and adolescent psychiatric disorders frequently continue into adulthood...they tend to use more health care services and have higher health care 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*” (p. 1248).<sup>62</sup>

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. Likewise, Magellan supports the notion that the PCP setting is “ideal for initiating services to children with emerging developmental and behavioral problems and common mental health/substance use disorders.” This is a valid assumption because the PCP setting also provides “opportunities for counseling, guidance, care coordination and chronic illness management...since primary pediatric mental health care is friendly to families and fully coordinated with the child’s other health care” (p. 1248).<sup>62</sup>

Recently, our national health landscape has markedly changed due to health reform initiatives as mandated by legislation. Most importantly, the new law has led to the creation of entities that promote the concept of a “health or medical home” in order to foster patient and family-centered healthcare. Understanding that one of the primary responsibilities of the health home is the provision of mental health services, Magellan has ensured that its network of providers treating young people with MEB disorders can fully support a system of care with the following tiers based on levels of complexity:<sup>63, 64</sup>

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 the level as noted above, i.e., ranging from supportive consultation to enhanced specialist consultation and intervention to specialist consultation/intervention with 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.<sup>64</sup>

# Core Network Competencies: 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 be supportive of not only parents, but to providers of early child care/education and other community members as well. As such, it is essential to further policies and to 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 networks of providers.<sup>6</sup>

## **Promoting culturally competent and trauma-informed approaches to care**

Core intervention strategies based on program evaluation research may significantly alter family difficulties and a child’s negative developmental spiral. These include the following: 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; and 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.<sup>6</sup> Additionally, psychosocial interventions for symptoms of MEB disorders in children/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.<sup>65</sup> Cultural and racial factors relating to the young person’s mental illness/emotional disturbance deserve closer attention and consideration. This requires special expertise and unique approaches to ensure the delivery of

culturally competent services to children and adolescents.<sup>66</sup>

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 rapidly changing demographic and cultural landscape within a nation that has grown increasingly multiracial and multicultural.<sup>66</sup> These demographic changes are represented in the child welfare system where more than 50% of children and adolescents served are African American, Latino and Native American. As such, these minority populations manifest unique challenges associated with mental illness, sources of stresses, patterns of psychopathology, access to services, 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 the following guiding principles (p. 1102 – 1112):<sup>66</sup>

1. Clinicians should 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.
2. Clinicians should conduct the evaluation in the language in which the child and family are proficient.
3. Clinicians should understand the impact of dual-language competence on the child’s adaptation and functioning.
4. Clinicians should be cognizant that cultural biases might interfere with their clinical judgment and work toward addressing these biases.
5. Clinicians should apply knowledge of cultural differences in developmental progression, idiomatic expressions of distress, and symptomatic presentation for different

disorders to the clinical formulation and diagnosis.

6. Clinicians should 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.
7. Clinicians should evaluate and address in treatment the acculturation level and presence of acculturation stress and intergenerational family conflict in diverse children and families.
8. Clinicians should 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.
9. Clinicians should evaluate and incorporate cultural strengths (including values, beliefs, and attitudes) in their treatment interventions to enhance the child and family's participation in treatment and its effectiveness.
10. Clinicians should treat culturally diverse children and their families in familiar settings within their communities whenever possible.
11. Clinicians should support parents to develop appropriate behavioral management skills consonant with their cultural values and beliefs.
12. Clinicians should preferentially use evidence-based psychological and pharmacologic interventions specific for the ethnic/racial population of the child and family they are serving.
13. Clinicians should identify ethnopharmacologic factors (pharmacogenomic, dietary, use of herbal cures) that may influence the child's response to medications or experience of side effects.

Along with striving to attain cultural competence in clinical practice and service delivery, the Children's Bureau, U.S. Department of Health and Human Services (HHS) purports an urgent need for child welfare professionals and treatment providers to apply principles of "trauma-informed" care in all aspects of service. This clarion call requires professionals to implement the following in their practices:<sup>67</sup>

- Work effectively with children, adolescents, families and caregivers to support healthy brain development by teaching positive parenting strategies to prevent (further) trauma.
- Recognize/assess the impact of maltreatment and trauma on brain development by observing for indications of developmental delays and causes for concern for each client.
- Address the effects of trauma (e.g., responses range from hyperarousal to dissociation or a combination, PTSD) by making the appropriate connections to needed services or referral to treatment as early as possible.
- Ensure that services provided to traumatized children are designed with essential components, i.e., to maximize their sense of safety, assist in reducing overwhelming emotions, and aid in making new meaning of their trauma history and current experiences.
- Improve all services through cross-system collaboration and trauma-informed practices.

## Screening and Assessment

There is agreement among youth and parent child welfare advocates, 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) that there is a gap between the need and receipt of services for children.<sup>43, 69, 68</sup> This has been demonstrated by increases in emergency department utilization rates for mental health care for children where mental health-related emergency department visits range from 2% to 5% of all pediatric hospital emergency department visits, with the rate being highest in rural areas (5%).<sup>43</sup> Mental health conditions seen in emergency departments are varied and often include the following: 1) suicide risk/attempts; 2) exhibiting dangerous behaviors—especially by youth with bipolar disorder; 3) substance use—especially marijuana, alcohol in combination with other drugs, and cocaine; 4) violence-related conditions; 5) child abuse and neglect; 6) mood disorders; and 7) anxiety disorders. Unfortunately, however, the National Center for Children in Poverty 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 their 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 practices” (p. 1, 3).<sup>43</sup>

The National Center for Children in Poverty also found that children and youth in foster care with mental health problems 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 nonwhite 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.<sup>43</sup> Further, since this concern of poor identification is pronounced in the foster care system, several professional associations have endorsed universal mental health screening for this population.<sup>68</sup> As discussed earlier in this section, family users of primary care services within a “health or medical home” model would typically receive appropriate mental health screening, and therefore, not need to use emergency room 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 (clinical triage) services in order to identify youth at risk and identify their needs.<sup>43, 68</sup>

The Child Welfare-Mental Health (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, during pediatric emergency room visits and primary care encounters, and during 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, to conduct comprehensive assessments for children with positive screening results, and to continue periodic screenings/assessments for ongoing mental health service needs. The following standardized instruments have been used effectively in the general pediatric population and high-risk groups:<sup>10, 67, 68, 69, 70, 71, 72</sup>

- **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*) and the 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*; 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, Mental Health (*CANS-MH*), Diagnostic Interview Schedule for Children Predictive Scales (*DPS*), Child and Adolescent Level of Care Utilization System (*CALOCUS*), *CASII*, 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 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 intellectual/developmental disorders.<sup>71, 72</sup> These evaluation components include: 1) health, developmental and behavioral histories; 2) physical exam (to include audiological and vision evaluations) with thorough search for dysmorphic features, neurologic abnormalities and skin pathology; 3) evaluation of child's overall level of functioning and determination of motor-adaptive problem-solving and social communication skills; 4) determination of the presence of DSM-5 diagnosis; 5) assessment of parents' or caregivers knowledge of IDD, coping skills and supports; and 6) laboratory investigation to search for known etiology or coexisting condition.<sup>71, 72</sup>

## Crisis Planning and Crisis 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.<sup>56</sup> An expert panel convened by SAMHSA developed the seminal work, *Practice Guidelines: Core Elements in Responding to Mental Health Crisis* (2009). These guidelines acknowledged 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” (p.1).<sup>73</sup> While crises can affect any youth with an MEB disorder, they must be anticipated for those who are diagnosed with serious mental illness (e.g., schizophrenia, bipolar disorder, major depression), co-occurring intellectual or developmental disabilities (IDD), and for individuals with a history of aggression and who are likely to be admitted to residential treatment (e.g., disruptive

behaviors, impulse-control, and conduct disorders, ADHD).<sup>56, 74</sup> To that end, the SAMHSA guidelines delineated 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, SAMHSA guidelines' goals promote consistency with recovery and resilience principles and help transition an agency from “largely 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).<sup>73</sup>

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). Specifically, study results have shown that use of frequent and high doses of antipsychotic medications to control aggressive behaviors do not prevent or decrease the use of seclusion and restraint for management of serious behavioral crises in adolescent patients.<sup>74</sup> In addition, the SAMHSA guidelines underscore the importance of caregivers, law enforcement officers and others providers addressing the impact of trauma as it relates to both the crisis event and the crisis response/intervention itself, to impose no 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 on going services and crisis plans” (p. 8).<sup>73</sup>

In order to meet the needs of a high-risk population, a health care system serving children and adolescents should include the following core crisis services along the continuum: 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; and 7) peer crisis services.<sup>75</sup> 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).<sup>73</sup> 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.<sup>73, 76</sup>

## 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 while addressing serious concerns of over-diagnosis and over-treatment in this vulnerable population. Magellan Healthcare considered this to be of utmost importance when it published and disseminated an educational tool, *Appropriate Use of Psychotropic Drugs in Children and Adolescents: A Clinical Monograph - Important Issues and Evidence-Based Treatment* (2013), to serve as guidance to staff and network providers, caregivers, and youth.<sup>77</sup> 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 modalities 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.\*<sup>77, 78</sup>

Many managed care organizations, child welfare agencies, and state welfare departments have developed formalized audits in order to review treatment rendered to ensure that children and adolescents receiving psychotropic drugs are treated safely and effectively. While state laws and organization policies are varied, the following represent the domains that are considered important to monitor.<sup>68, 79</sup>

- **Informed consent**—from the child/adolescent and/or legal guardian for each psychotropic medication prescribed.
- **Patient assessment**—to guide prescription of psychotropic medications.
- **Use of credentialed and licensed providers**—i.e., physician, nurse practitioner, physician assistant.
- **Ongoing monitoring of clinical measures**—blood pressure, weight, abdominal girth, Body Mass Index [BMI], Abnormal Involuntary Movements [AIMS], and laboratory tests

\*N.B. Magellan’s *Appropriated Use of Psychotropic Drugs in Children and Adolescents: A Clinical Monograph - Important Issues and Evidence-Based Treatment* (2013) 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.

(i.e., fasting glucose, lipids, Complete Blood Count [CBC], liver function, lithium levels, thyroid function, renal function, valproic acid/carbamazepine levels) and intra-class and inter-class polypharmacy.

- **Adverse event reporting**—i.e., drug reactions, harmful drug events and 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: 1) staff access to and documentation of psychotropic medication; 2) ongoing communication of pertinent treatment issues with child and caregivers; 3) staff use of reliable and valid rating scales to quantify response of target symptoms; 4) evidence of child mental health training for case workers; and 5) 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” (18 – 21 yrs. old) youth leaving foster care and agency oversight.<sup>79</sup>

## Offering Family-Driven, Youth-Guided Components of Care

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 (SOC).\*

SAMHSA required that the SOCs support a philosophy and a 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 utilization 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.<sup>80,81</sup> More recently, the AACAP has 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 ones.<sup>82</sup> In accord with AACAP recommendations, the CW-MH Group emphasizes the importance of two key elements, parent/family engagement and youth empowerment/peer support strategies.<sup>68, 69, 82, 83, 84, 85, 86</sup>

**Parent/Family Engagement\***—These services are critical since they can help caregivers cope more effectively with the challenges associated with children diagnosed with MEB disorders and involvement with a child welfare system, when applicable. They represent a constellation of formal/informal services that can tangibly help families to care for their children and provide assistance with out-of-home care placement and when transitioning a return 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; and 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.

\*The system of care concept for children and adolescents with mental health challenges and their families was first published in 1986 (Stroul & Friedman), articulating a definition for a system of care 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. Now, 25 years later, the concept is widely accepted, used, and adapted in national policy and across service systems in states, communities, tribes, and territories.

Examples of evidence-based or promising programs include **Co-Parenting, Parents Anonymous, Parent Engagement and Self-Advocacy Program [PESA], Parent Mentoring Program 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 out (“aging out”) of foster care and/or are involved in the juvenile justice system. Most often, these adolescents come from single-parent households where usually the father is absent. Moreover, some youth can exhibit multiple risk behaviors, e.g., they have become involved with negative peers, evidence academic problems or demonstrate negative school behaviors (e.g., suspensions or expulsions). The goals of youth empowerment programs are to provide opportunities for participants to obtain life-enhancing 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 they may be 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: 1) mentoring; 2) academic remediation; 3) education; 4) vocational and employment preparation services; 5) college education attainment services; 6) court-related services; and 7) 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 and the General College and Vocational Preparation Programs: Casey Life Skills. While not an exclusive list, these programs have provided empowerment for youth enabling them to assert themselves beyond the control of a foster care or child care agency, develop emotional regulation and gain a sense of control of their own maturation and progression to adulthood.

## **Providing Evidence-Informed Psychosocial Treatments**

Despite cumulative research evidence, prescribers often employ medications 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 or in augmenting treatment.<sup>77</sup> As discussed in the previous section on psychotropic medication oversight and monitoring, this controversial practice has led to a renewed interest 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 where “psychotherapeutic concepts are of central importance in assessing and providing care to children, adolescents, their families and their communities (e.g., schools, other health care 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” (p.1).<sup>87</sup>

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: 1) the reduction of symptoms; 2) improvement of emotional and behavioral functioning; 3) remediation of skill deficits; and 4) removal of



obstacles to normal development.<sup>59</sup> These goals may be met through a therapist/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).<sup>59</sup> 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” (p. 43).<sup>69</sup> 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.<sup>59</sup>

To meet the needs of a high-risk population, a health care system serving youth should maintain a network of credentialed practitioners demonstrating competency in the following core evidence-based psychosocial interventions:<sup>7, 18, 36, 38, 43, 52, 59, 69, 88, 89, 90, 91, 92, 93, 94, 95</sup>

**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 facilitating the child to 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 both the relationship and communication patterns

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 Behavior 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-moderate obsessive-compulsive disorder (OCD), and may be efficacious for treating generalized anxiety disorder (GAD), separation anxiety disorder (SAD) and social phobia in children and adolescents. **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 effect of traumatic life experiences and teach new coping skills to deal effectively with them, e.g., emotional regulation, stress management, 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) Trauma narrative; 6) In vivo mastery of trauma reminders; 7) Conjoint child-parent sessions; and 8) Enhancing future safety and development. Other methods of CBT based on the *cognitive reprocessing* or *cognitive restructuring* principles deal 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, since their goal is to help the young person identify dysfunctional thought patterns, challenge them and replace them with more constructive alternatives. These CBT approaches, cognitive reprocessing leading to cognitive restructuring, are efficacious in the treatment of adolescent SUDs, altering the thought processes that lead to addiction and other maladaptive behaviors. In a high-risk population, CBT demonstrates the strongest record of success with ethnic minority youth.

***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 and to monitor progress of program goals. It requires a detailed description of the frequency and intensity of each problem behavior, 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, 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 ASD, 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.

***Individualized Educational Interventions/Skill Development Models***—Fostering the development of adaptive social skills is a major component of any program designed to assist children/adolescents with IDD who will require lifelong and individualized support. Key elements of “person-centered” planning for this population involve individualized plans matching a selected 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 (i.e., family life, school and the 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 techniques, e.g., demonstrations by instructors, modeling, role-playing, social practice, positive reinforcement and constructive feedback rehearsed in a structured and therapeutic setting tested in the real world. Programs tend to enhance discrimination skills in children with IDD to provide the essential protection and support.

***Parent Counseling***—This psychoeducational intervention providing guidance to parents is conducted with a single parent, couple or in groups. A major focus of the session(s) is to impart information to parents on normal growth and development and assist them in better understanding the child’s problem, illness or long-term disability. It includes helping parents modify any practices or issues that may be contributing to current difficulties (e.g., maternal over-involvement, paternal withdrawal, sibling conflicts). This venue provides an opportunity to help parents select appropriate treatments and educational programs and learn how to evaluate their effectiveness or



need for modifications. In essence, parents learn to become effective advocates for their children through enhanced parenting skills.

**Parent Training Programs**—These programs provide targeted education to biological, foster and kinship parents to prevent or ameliorate future problems with their children and family unit. Concepts taught in parent training programs are also found to be beneficial for higher-risk populations such as pregnant teenagers. Pregnant teenagers along 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; and 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** model. Utilizing basic tenets of social learning theory and operant conditioning, their focus is on promoting positive parenting and caring relationships while teaching essential behavioral management skills, e.g., rewarding positive behavior, ignoring when necessary, and appropriate use of punishment. Parent-focused interventions that exemplify this model include the *Parent Management Training (PMT)*, *Incredible Years*, and the *Positive Parenting Program*. A parent-focused program using the same theoretical foundation is *Project Keep* (Keeping Foster and Kin Parents Supported and Trained) that was developed for children already exhibiting externalizing symptoms and problem behaviors. Another variation designed specifically for infants and toddlers in foster care is the *Attachment and Bio-behavioral Catch-up Intervention*. This program helps foster care parents provide nurturing care and address the developmental needs for children who have been maltreated. This method frequently uses videotaped

sessions where foster parents can learn the value of touching, cuddling, hugging and creating conditions where the child can learn to recognize and express emotions. A structured program for parents who have a history of abusive behaviors is the *Parent Child Interaction Therapy (PCIT)* which 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 in distress. Family therapy is often used when there are difficulties in developmental issues for the child/adolescent or when the family is undergoing significant and stressful changes (e.g., divorce, remarriage etc.). 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. Similar methods for behavior change are used in **Functional Family Therapy** where older children with disruptive behaviors and substance abuse are treated. This intervention aims to enhance protective factors and reduce the risk factors within the family. Other intensive community-based interventions with outreach into the home, neighborhood, school and peer group include **Multi-systemic Family Therapy (MST)** and **Multidimensional Treatment Foster Care (MTFC)**. These approaches are used in cases where the child/adolescent is exhibiting chronic disruptive or anti-social behavior, and who might otherwise be incarcerated, placed in residential treatment or hospital. The aim of Multi-systemic Family Therapy is to preserve families through the difficulty of raising very troubled teenagers through access to therapists on a 24/7 basis. In order to support foster parents and ultimately return a child to birth parents, Multidimensional Treatment Foster Care 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 a semi-directive therapy, it is a nonjudgmental and non-confrontational intervention designed to move the adolescent to a state of motivation and readiness for change. The approach attempts 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 motivation, build a plan for change and learn on-going coping strategies for relapse triggers and other high-risk situations.

## **Monitoring Clinical, Social and Adaptive Outcomes**

Child welfare agencies, clinics and schools collaborate with mental health partners and use multiple informants to track the outcomes of psychosocial interventions received by children and families in order to monitor progress, modify interventions or goals, and improve service delivery. These are best tracked in a system such as a dashboard displaying a wide variety of outcomes for the entire population. In a truly comprehensive system, the outcome indicators and measures typically include the following areas: 1) psychosocial functioning; 2) school functioning; 3) placement stability/permanency; 4) length of time in foster care; 5) length of stay in inpatient and residential treatment; 6) use of restraint and/or seclusion in inpatient or residential treatment; 7) community tenure for older and transition age youth who have involvement with the juvenile justice system; 8) patient safety; and 9) client satisfaction. 68 69 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 in reviewing 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.

# Conclusion

Magellan has built a comprehensive infrastructure with a solid clinical foundation 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 needed acute and long-term treatment. Our system-of-care 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 youth-guided and family-driven. Participation by youth and their families is central to ensuring youth and family voice and choice throughout the treatment process. Magellan offers a crisis continuum to ensure that crises are addressed in the moment and maintain stability 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.

As part of our strategy, Magellan's focus is 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. Magellan also collaborates with national experts to produce new tools and advanced best practices, through our partnerships with the Building Bridges Initiative and organizations such as the Federation of Families for Children's Mental Health. 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 system of care 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 having a significant relationship with children and adolescents.

Magellan has ensured that our network of providers treating young people with MEB disorders can fully support a system of care including the following: preventive services and screening; early intervention and routine care provision; specialty consultation; treatment and coordination; and intensive mental health services for complex clinical problems. Based on 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; and 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.

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