# Treating Offenders with Mental Illness: A Review of the Literature



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Treating Offenders with Mental Illness: A Review of the Literature

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#### Abstract

The persistent involvement of seriously mentally ill adults and juveniles in the criminal justice system is a growing concern for policy makers, administrators, and treatment providers in the criminal justice and mental health systems. While many researchers and practitioners have raised questions on how to prevent involvement and best treat adult and juvenile offenders with serious mental illness, empirical research has not advanced as quickly as the concerns. One difficulty contributing to the lack of research is the ethical concerns about conducting rigorous outcome research that would require the randomization of mentally ill participants into treatment and control groups. Additionally, many researchers have pointed out there is a lack of agreed upon outcomes measured in studies. For example, criminal justice systems are primarily interested in criminal justice outcomes, such as recidivism, while mental health providers are often concerned with mental health and quality of life outcomes. Despite the lag in empirical research studies, numerous intervention and treatment programs have been developed throughout the nation.

The purpose of this report is to review recent research articles, governmental reports, and other publications related to the treatment of adult and juvenile offenders with serious mental illness within the criminal justice system. The first section of this report discusses the prevalence rates of offenders with mental illness and the relationship between mental illness and criminal conduct. The second section introduces a framework for the treatment of offenders with mental illness. The third section details research findings on existing interventions and treatment programs at points of contact within the criminal and juvenile justice system, including arrest, booking, court, incarceration, and probation and parole. This section also reviews interventions and programs for youthful and adult offenders in community and institutional settings including in addition to research on cost effectiveness. The report concludes with best practice recommendations for managing and treating mentally ill offenders in the criminal and juvenile justice system.

#### **PART I: Introduction**

#### **National Rates of Mental Illness**

According to a Report of the Surgeon General (U.S. Department of Health and Human Services, 1999), one in five adults in the United States (U.S.) have a diagnosable mental illness over the course of one year, making the annual prevalence rate in the U.S. is approximately 20%. The report indicated 5.4% of adults have a diagnosis of a serious mental illness (Kessler, 1996, as cited in U.S. Department of Health and Human Services, 1999), where serious mental illness was defined as, "at least one 12-month DSM[III-R] disorder other than substance use disorders, and to have serious impairment" (Kessler et al., 1996, p. 60). The report further specified individuals with a serious and persistent mental illness (SPMI) to be at an annual prevalence rate of 2.6% (National Advisory Mental Health Council, 1993, as cited in U.S. Department of Health and Human Services, 1999) and defined SPMI as, "schizophrenia, bipolar, other severe forms of depression, panic disorder, and obsessive-compulsive disorder" (p. 46). More recently, the National Survey on Drug Use and Health found approximately 5% of adults in the U.S. have a serious mental illness diagnosis (National Institute of Mental National Institute of Mental Health, 2008). This survey defined serious mental illness as "a mental, behavioral, or emotional disorder (excluding developmental and substance use disorders), diagnosable currently or within the past year, of sufficient duration to meet diagnostic criteria specified within the 4<sup>th</sup> edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities" (p. 1).

#### Rates of Adult Offenders with Mentally Illness

There are variations in the reported rates of individuals with mental health disorders involved in the criminal justice system; however, these differences appear to be explained best by the criteria used to define 'mental health disorders' in the studies. For example, the Bureau of Justice Statistics reported 56% of inmates in state prisons, 45% of inmates in federal prison, and 64% inmates in jails had a 'recent history' or 'symptoms' of a mental health disorder (James & Glaze, 2006). Steadman, Osher, Robbins, Case, and Samuels (2009) pointed out, this report is often "mistakenly cited as evidence of an escalating problem," despite the fact that, "the methods used in this study are not consistent with other efforts to establish the prevalence of mental illness in

jails" (p. 761), as functional impairment and duration of symptoms were not assessed and symptoms as a result of a general medical condition or bereavement were included.

Steadman et al. (2009) administered the Structured Clinical Interview for DSM-IV (SCID) to 822 jail inmates and found 14.5% of males and 31.0% of females qualified for a diagnosis of a serious mental illness, which included major depressive disorder, depressive disorder not otherwise specified, schizophrenia spectrum disorder, schizoaffective disorder, schizophreniform disorder, brief psychotic disorder, delusional disorder, and psychotic disorder not otherwise specified. Steadman and colleagues asserted these findings were similar to those found by Fazel and Danesh (2002), who conducted a meta-analysis that included prisoners in 12 countries and found approximately 3.7% of male inmates and 4% of female inmates were diagnosed with a psychotic illness and 10% of male inmates and 12% of female inmates had a diagnosis of major depression. The researchers concluded, "approximately one in seven prisoners in western countries have a psychotic illness or major depression" (p. 548). One study, which assessed the level of impairment among mentally ill prisoners, found 39% of inmates with mood disorders and 35% with anxiety disorders experienced severe impairment, with 56% and 15% respectively, experiencing moderate impairment (Neighbors, 1987, as cited in National Institute of National Institute of Corrections, 2004).

There are far fewer reports that document prevalence of mental illness in probation samples. One report estimated approximately 16% of individuals on probation have some mental disorder (Ditton, 1999); however, the threshold for identification as having a mental disorder was low . An individual was considered to have a mental disorder if they self-reported any current mental or emotional condition and indicated they had an overnight stay at a hospital or treatment program. Crilly, Caine, Lamberti, Brown, and Friedman (2009) found 26.6% of probationers reported having some mental condition compared to 17% of individuals not involved in the criminal justice system. Though rates of serious mental illness among probationers may be unknown, based on these prevalence rates studies, it is presumed that, as with incarcerated populations, individuals with mental illness are also overrepresented in probation populations.

#### Rates of Juvenile Offenders with Mental Illness

Studies vary significantly on estimated the rates of juvenile offenders with mental illness (Fazel, Doll, & Långström, 2008); as with adult prevalence rates, this is likely due to methodological differences in the research studies. Recent studies have estimated the prevalence of juvenile offenders who have at least one diagnosable mental illness (including anxiety disorders, affective/mood disorders, disruptive/conduct disorders, and substance use disorders) to be between 67% to 72% (A. Robertson, Dill, Husain, & Undesser, 2004; Shufelt & Cocozza, 2006; Skowyra & Cocozza, 2007; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002; Vincent, Grisso, Terry, & Banks, 2008; Wasserman, Ko, & McReynolds, 2004). Research on the severity of the mental disorders observed in juvenile offenders samples is tenuous. Nevertheless, Cocozza, Skowya and Shufelt (2010) estimated 27% of youth placed in juvenile justice settings suffer from lowered levels of functioning as a result of severe mental illness and based on prevalence rates in the general population.

The most frequent diagnosis held by juvenile offenders is conduct disorder (CD). Individual studies have reported rates of CD to be between 31.7% (Wasserman et al., 2004) and 50.7% (Cloyes, Groot, Bassett, Beck, & Iribarren, 2008). However, the diagnosis of CD as a classification of a mental disorder is a highly debated topic within juvenile justice literature. Researchers question whether CD is a sign of psychopathology or merely a clinical description of the type of anti-social behavior that brought the youth into contact with the juvenile justice system (Kenny, Lennings, & Nelson, 2007). Those who argue against CD as a psychological disorder point to the fact that a diagnosis does not require symptoms of disturbed thought or emotion (Grisso, 2004). To address these concerns, in their study of psychiatric disorders in secure juvenile settings, Teplin et al. (2002) looked at rates of mental illness in juvenile offenders including and then excluding CD. The researchers reported rates of mental illness among juvenile offenders dropped only slightly when diagnoses of CD were excluded. Similarly, Skowyra and Cocozza (2007) reported overall rates of mental illness dropped from 70.4% to 66.3% when those with a diagnosis of CD were removed from the sample. Thus, the differences when excluding CD do not dramatically change prevalence rates of mental illness in juvenile offenders.

Overall, however, researchers have estimated the prevalence rates of mental illness found juvenile justice involved youth is approximately two times as high as the general adolescent population (A. Robertson et al., 2004).

#### **This Report**

This report focuses on research and literature that includes studies on adult and juvenile offenders who are diagnosed with serious mental illness. There is a general consensus in the literature that serious mental illness in adults includes disorders such as schizophrenia spectrum disorders, bipolar disorder, major depression, and anxiety disorders (Epperson et al., 2011; Fazel & Grann, 2006; Lamb & Weinberger, 2011). Nevertheless, some researcher studies and organizations, such as the National Institute of Corrections (NIC; 2004), also include personalities disorders in this grouping. The adult research and literature reviewed for this report included primarily the former disorders, though some studies reviewed may have included offenders who had diagnoses of antisocial personality disorder.

It is noted that juvenile offender literature differs drastically in comparison to the adult literature on the mental disorders included in research studies. For example, the most common diagnosis among juvenile offenders was disruptive disorders, such as conduct disorder (Cloyes et al., 2008; Wasserman et al., 2004), followed by Attention Deficit/Hyperactivity Disorder (ADHD; Cloyes et al., 2008; Ståhlberg, Anckarsäter, & Nilsson, 2010), and there is limited research on the severity of mental illness among this population. Thus, it will be important to keep in mind the qualitative differences when comparing adult programs with juvenile programs and that findings or best practice for one group may not generalize to other populations.

#### Why is the Treatment of Offenders with Mental Illness Important?

There is growing concern that offenders with mental illness are disproportionately represented in the criminal justice system (Arons, 2000; Duncan, Nicol, Ager, & Dalgleish, 2006; Epperson et al., 2011; Hartford, Carey, & Mendonca, 2006; Scott, McGilloway, Dempster, Browne, & Donnelly, n.d.). In addition to disproportionate representation, researchers have found offenders with serious mental illness transitioning out of incarceration are twice as likely to have their probation or parole revoked (Prins & Draper, 2009), are at an elevated risk for rearrest, incarceration, and homelessness (Kesten et al., 2011), lack skills to obtain and sustain

employment (Wolff, Epperson, & Fay, 2010), and have higher rates of medical problems (Center for Substance Abuse Treatment, 1995, as cited in Kleinpeter, Deschenes, & Blanks, 2006).

Some researchers have asserted adults with serious mental illness are 'criminalized' due to a lack of available treatment in mental health settings (Hartford et al., 2006; Lamb, Weinberger, & Gross, 2004; Lange, Rehm, & Popova, 2011; Lurigio, 2001; Ryan, Brown, & Watanabe-Galloway, 2010; Soderstrom, 2007; Teplin, 2000; Walsh & Holt, 1999). However, others have pointed out there is insufficient empirical evidence to draw this conclusion (Epperson et al., 2011; Morabito, 2007; Prins, 2011; Skeem, Manchak, & Peterson, 2011). Regardless of the process by which mentally ill adults come into contact with the criminal justice system, offenders with mental illness span the boundaries of both the criminal justice and mental health systems. For example, Buck, Brown, and Hickey (2011) note a jail in Texas is the "largest provider of mental health beds" in the state and is one of the largest in the nation, second only to Los Angeles County Jail (p. 120). Unfortunately, problems such as this have led to a lack of clarity as to which system should be held clinically and financially responsible these individuals (Wolff, 1998).

A. Wilson and Draine (2006) contended there is a great need for collaboration between systems after finding most jail and prison reentry programs are led, funded, developed, and staffed by the criminal justice system, rather than mental/behavioral health organizations. Additionally, Ryan et al. (2010) highlighted this collaboration is vital as criminal offenders are not often welcomed or eligible for typical mental health treatment facilities and their mental health needs are not generally met within criminal justice systems. Other researchers have posited that although there are efforts to collaborate, institutions involved with offenders with mental illness may have differing goals (Epperson et al., 2011; Grisso, 2004; Rice & Harris, 1997; P. Robertson, Barnao, & Ward, 2011). That is, mental health agencies commonly have the goal of reducing mental health symptoms and improving quality of life and criminal justice agencies commonly have the goal of reducing the review is attempt to determine if the extant literature supports the notion that the goals of the mental health providers, namely addressing mental health issues, assist in addressing the goals of the criminal justice system by reducing criminal offending.

Researchers also cite a legal (Cohen, 2008) and ethical responsibility (Blackburn, 2004) to treat incarcerated offenders with mental illness. Citing federal court decisions and the Eighth Amendment's ban on cruel and unusual punishment, Cohen (2008) wrote, "the duty to provide medical or psychological care is preventative and ameliorative, and emphatically includes an obligation to relieve pain, prolong life, and stabilize (if not cure) the malady" (Cohen, 2008, p. 2-3). The author went on to state the "right to treatment, at least for serious disorders, would be meaningless without an additional duty to provide diagnosis. Similarly, the Juvenile Justice and Delinquency Prevention Act (as cited in Penner, Roesch, & Viljoen, 2011) requires programs to meet the mental health needs for juveniles who are incarcerated to receive federal funding and avoid litigation if failure to provide such services causes serious harm.

#### What is the Relationship Between Mental Illness and Criminal Offending?

Regarding the relationship between mental illness and criminal offending in adults and juveniles, some researchers have suggested there is an association between mental illness and criminal conduct given the higher arrest rates of offenders with mental illness (Hodgins, 1998), particularly in violent offending (Arnold-Williams, Vail, & MacLean, 2008; Hodgins, Mednick, Brennan, Schulsinger, & Engberg, 1996; Large, Smith, & Nielssen, 2009; Link, Andrews, & Cullen, 1992; Mullen, 2000 as cited in Mullen, 2002). Others have proposed the relationship between mental illness and violent offending is not as a result of simply having a mental health diagnosis, rather, having a mental health disorder with current psychotic symptoms (National Institute of Justice Research Preview, 1996, as cited in The Sentencing Project, 2002). However, other researchers have found no difference in offense rates of offenders with serious mental illness neutal illness are due to methodological factors and asserted offenders with serious mental illness are at a higher risk for reoffending than the general population; however, they are at a lower risk for reoffending than general criminal populations.

These conflicting findings have led some researchers to believe the answer is more complicated than a causative relationship (Epperson et al., 2011; Fazel & Grann, 2006; W. H. Fisher & Drake, 2007; Hodgins, 2002). Pallone (1991) suggested, "A more moderate approach might grant that some portion of those who commit serious crimes are indeed *seriously* mentally disordered, quite apart from whether a specific mental disorder is related to the particular

criminal behavior at hand in any way that can reasonably be said to be 'causative'" (p. 6). As an example, a systematic review and meta-analysis conducted by Large et al. (2009), found the number of homicides committed by individuals with schizophrenia to be "associated with the rates of other homicides" in a geographic area (p. 127). The authors suggested there appears to be a relationship between schizophrenia and homicide; however, they posited the relationship does not appear to be causative and more likely due to social factors that influence violence in general, including substance abuse and low socio-economic status, which may disproportionately affect individuals with this diagnosis.

Bonta et al. (1998), conducted a meta-analysis to greater understand what factors predicted recidivism in offenders with mental illness. The researchers found the factors that predict criminal offending in offenders with mental illness are similar to that of general offenders, including criminal history, antisocial personality, substance abuse, and family dysfunction. Additionally, clinical or psychopathological variables were found to be unrelated, or inversely related, to recidivism. Supporting this assertion are findings that offenders with mental illness scored as high on criminal thinking and attitudes scales as offenders without mental illness (Morgan, Fisher, Duan, Mandracchia, & Murray, 2010) and additional research found that the treatment of psychopathology alone does not lead to a reduction in recidivism (Bonta et al., 1998; Case, Steadman, Dupuis, & Morris, 2009; Epperson et al., 2011; Fazel & Grann, 2006; Lamberti, 2007; Morgan et al., 2010). Commensurate with these findings, some have suggested offenders with mental illness are overrepresented in the criminal justice system due to having a disproportionate quantity or severity of these risk factors present (Large et al., 2009; Prins & Draper, 2009) rather than inferring a causative relationship between mental illness and criminal offending.

The results of this research has led many to advocate for treating offenders with mental illness similarly to non-mentally ill offenders (Andrews & Bonta, 2006; G. Harris & Rice, 1997; Skeem et al., 2011). That is, treatment should target criminogenic needs. One such treatment model that has a large evidence base in treating criminal offenders is the Risk Need Responsivity model, which focuses on the 'Central Eight' criminogenic needs: history of antisocial behavior, antisocial personality pattern, antisocial cognition, antisocial associates, family/marital

circumstances, school/work functioning, leisure/recreational activities, and substance abuse (Andrews & Bonta, 2006). This model will be further discussed below.

# PART II: Evidence Base for Working with Offenders with Mental Illness

#### General Framework for the Treatment of Criminal Offenders

Based on the knowledge that criminogenic needs must be targeted to reduce the risk of recidivism, some researchers have suggested using the Risk Need Responsivity (RNR) model as one example of a framework or guide for treatment planning and program design (Andrews & Bonta, 2006; Epperson et al., 2011; Rice & Harris, 1997).

Andrews and Bonta (2006) divide the essential elements of the RNR model into 15 principles, which can be used by agencies and practitioners in program design and treatment planning. The first three principles are overarching principles that should serve as foundations for agencies that work with offenders. These include, 'Respect for the Person and the Normative Context,' treatment should be humane and ethical, 'Psychological Theory,' programs should be based in personality and cognitive social learning, and 'General Enhancement of Crime Prevention Services,' which validates that the reduction of crime victimization can be a legitimate goal of corrections and community mental health organizations (Andrews & Bonta, 2006, p. 46).

The next set of principles are the 'core' principles. Core principles should underscore all elements of treatment. The first core principle is the 'Risk Principle.' The risk principle first states that an individual's propensity or risk to engaging in future criminal behavior can be predicted. Prediction of risk should be done using actuarial risk measures, that is, tools that have undergone research to understand the psychometric properties and demonstrated an acceptable level of validity. This principle also states the intensity of interventions and treatment should match the level of risk. This means for a low-risk offender "minimal or no intervention" is sufficient, while high-risk offenders will require "intensive and extensive services" (Andrews & Bonta, 2006, p. 48). Additionally, higher-risk offenders should be given priority treatment over lower-risk offenders. It is of note, when intensive services are provided to low-risk individuals, the services are likely to have a negative effect on the individual (Rice & Harris, 1997).

The second core principle is the 'Criminogenic Need Principle.' The authors refer to needs as "problematic circumstances" that are troubling to an individual (Andrews & Bonta, 2006, p. 49). However, they clarify, in order to reduce risk of recidivism, treatment must target criminogenic needs. Andrews and Bonta argue, "Offenders have a right to the highest-quality service for other

needs, but that is not the primary focus of *correctional* rehabilitation" (2006, page 49). The authors have identified eight criminogenic risk and need factors, which should be the focus of treatment. These risk and need factors are referred to as the 'Central Eight,' with the first four, or 'Big Four,' having the greatest impact on recidivism, and the second four, or 'Moderate Four,' have a slightly less, but still impactful relationship with future criminal behavior. These targets include:

- 1. History of Antisocial Behavior. For this risk factor, the dynamic need to be targeted in treatment is, "building up new noncriminal behaviors in high-risk situations and build self-efficacy beliefs supporting reform" (p. 58).
- Antisocial Personality Pattern. This is described as "impulsive, adventurous pleasureseeking, generalized trouble (multiple persons, multiple settings), restlessly aggressive, callous disregard for others" (p. 58). For this risk factor, the dynamic need to be targeted in treatment is, "weak self-control skills, weak anger management skills, and poor problem solving skills" (p. 58).
- 3. Antisocial Cognition. This includes "attitudes, values, beliefs, rationalizations, and a personal identity that is favorable to crime" (p. 59). For this risk factor, the dynamic need to be targeted in treatment is, "reduction of antisocial thinking and feeling and through building and practicing of less risky thoughts and feelings" (p. 59).
- 4. Antisocial Associates. This includes, "both association with procriminal others and relative isolation from anticriminal others" (p. 59). For this risk factor, the dynamic need to be targeted in treatment is, "…reduce association with procriminal others and enhance association with anticriminal others" (p. 59).
- 5. Family/Marital Circumstances. This includes, "poor-quality relationships in combination with neutral expectations with regard to crime and procriminal expectations. For this risk factor, the dynamic need to be targeted in treatment is, "Strong nurturance and caring in combination with strong monitoring and supervision" (p. 59).
- School/Work. This includes, "low levels of performance and involvement and low levels of rewards and satisfactions" (p. 59). For this risk factor, the dynamic need to be targeted in treatment is, "Enhance performance, involvement, and rewards and satisfactions" (p. 59).

- Leisure/Recreation. This includes, "Low levels of involvement and satisfaction in anti-criminal leisure pursuits" (p. 59). For this risk factor, the dynamic need to be targeted in treatment is, "Enhance involvement and rewards and satisfactions" (p. 60).
- Substance Abuse. This includes, "problems with alcohol and/or other drugs (p. 60). For this risk factor, the dynamic need to be targeted in treatment is, "Reduce substance abuse, reduce personal and interpersonal supports for substance-oriented behavior, enhance alternatives to substance abuse" (p. 60).

The final core principle is the 'General Responsivity Principle.' Responsivity is defined as delivering a program or curriculum in a manner that matches the learning style and ability of the target audience. General responsivity means a program should use methods of delivery that are known to be most effective. The authors wrote, "the most powerful influence strategies available are cognitive-behavioral and cognitive social learning," which includes strategies such as, "modeling, reinforcement, role playing, skill building, modification of thoughts and emotions through cognitive restructuring, and practicing new, low-risk alternative behaviors over and over again in a variety of high-risk situations until one gets very good at it" (Andrews & Bonta, 2006, p. 50). Thus, treatment programs working to reduce the risk of recidivism will be most effective if they employ one of these two methods of treatment delivery and the corresponding strategies and interventions.

The next set of principles have a focus on key clinical issues. The first clinical issue is the 'Introduction of Human Service,' which states, "The typical legal and judicial principles of deterrence, restoration, just desert, and due process have little to do with the major risk/need factors. It is through human, clinical, and social services that the major cause of crime may be addressed" (Andrews & Bonta, 2006, p. 47). This means criminogenic needs are largely unaffected by the aforementioned interventions, though such interventions may be appropriate for lower risk individuals or individuals who are concurrently enrolled in treatment services.

Closely related to general responsivity, is the next clinical issue, the 'Specific Responsivity Principle.' Specific responsivity is a concept which means treatment should be matched to the recipients' individual characteristics, including personality and cognitive style. For example, it may not be appropriate to put an offender with social phobia or extreme anxiety in a large group, or to put an individual with low intelligence or a learning disorder in a group that uses a high

amount of didactic or written material alone. Other responsivity factors which the authors noted are important to consider when delivering treatment include interpersonal sensitivity, anxiety, verbal intelligence, cognitive maturity, and level of motivation for treatment (Andrews & Bonta, 2006, pp. 50-51).

Responsivity factors specific to a mentally ill population can include mental health symptoms, if those symptoms interfere with treatment, cognitions, or motivation for change. For example, Epperson et al. (2011), wrote, "some risks may not be addressable until others are managed through therapeutic intervention. For example, intervening to change antisocial cognitions would not make sense if an offender is actively psychotic, experiencing seizures, or intoxicated" (p. 13). Other problems that impact the severely mentally ill are homelessness, victimization, poverty, substance abuse, and unemployment. These will be an important responsivity factors to address in treating mentally ill offenders. For example, researchers have found contact with treatment providers is often disrupted in mentally ill homeless populations (Hartford, Carey, & Mendonca, 2007).

The next principle, 'Breadth,' clarifies that it is imperative multiple criminogenic needs be targeted in treatment, particularly with higher-risk offenders. Next is, 'Strength,' highlights that strengths in some areas may mitigate risk in other areas. The next principle, 'Structured Assessment,' is important in determining risk. This principle points to the importance of using well researched actuarial assessments, as they are considerably more reliable than professional judgment. The last core principle is, 'Profession Discretion.' This principle states that on rare occasions, professional judgment may override structured assessments; however, when this happens it must be well-documented.

The final three principles are organizational principles. These organizational principles outline that when available and appropriate, treatment in the community is preferred, treatment providers should maintain a quality therapeutic relationship and be skilled providers, and lastly, programs should include training, supervision, and adherence monitoring of staff that is commensurate with the RNR model. Using all of the above principles, with focus on the three core principles as a framework, an agency working with mentally ill offenders can implement an evidenced based curriculum or program that conforms to the RNR model and is more likely to reduce recidivism.

Utilizing the RNR model with offenders with mental illness requires the modification of the typical offender rehabilitation program. The model offers the individualized adaptation of interventions and through responsivity factors. Responsivity factors are especially salient with the mentally ill population and requires good screening and assessment of mental illness and substance abuse problems throughout the points of contact within the correctional system. Better screening and identification would allow for correctional programs to appropriately remediate mental health issues that may interfere with rehabilitation efforts and improve outcomes. For example, an offender may present to a probation officer as agitated, resistive to treatment, and unmotivated to change. If this offender were to be screened using a validated depression screening instrument it may be found he or she is depressed and recommend cognitive behavioral therapy or mediation. Once appropriately treated, it is likely the offender's agitation, motivation, and resistance (all symptoms of depression) would change making them more amenable to treatment that targets their criminogenic needs.

It is worth noting that although the RNR model has a strong evidence based for working with non-mentally ill offenders, it has been criticized in the literature for being too deficit-based and emphasizing problems rather than reinforcing strengths in offenders. This critique is especially relevant to mentally ill offenders who are already disadvantaged and stigmatized. In a review of forensic mental health treatment, P. Robertson et al. (2011), provide a critique of the RNR model. The authors argue that this model has not been well researched in non-correctional settings and suggested the framework can place treatment providers in ethically compromising situations, due to the possibility of ignoring other needs, such as reducing suffering, as it is overly-focused on risk. The authors suggested the Good Lives Model (GLM) is a superior rehabilitation model, which is described as a strength based, humanitarian approach. Although P. Robertson et al. (2011) adds that this model is in the early stages of research development and at this time can really only be considered 'promising.' Andrews and Bonta (2006) counter that the GLM lacks a focus on risk and need principles, an essential piece of any offender treatment program, and that the RNR model accounts for special needs of offenders, mentally ill, or not, through the responsivity principle.

# Mental Illness as a Risk Factor?

To reiterate the discussion on mental illness and its relationship to offending, researchers have failed to find a proximal causative relationship between mental illness and criminal behavior. In terms of the RNR model, this means the presence of a mental illness in and of itself should not be considered a risk factor for future criminal behavior. Again, risk for offenders with mental illness can be predicted by the same risk factors that predict future criminal behavior in non-mentally ill individuals (Andrews & Bonta, 2006; Bonta et al., 1998), though they may be disproportionally affected by these risk factors (Large et al., 2009; Prins & Draper, 2009).

Nevertheless, mental illness, in conjunction with other factors, may play a role in predicting risk. Commensurate with the research of Bonta et al. (1998), recent research by Elbogen and Johnson (2009), found severe mental illness alone did not predict future violent behavior. However, the researchers did find mental illness was significantly related to the prediction of future violent behavior when offenders were diagnosed with a serious mental illness as well as a co-occurring substance abuse or dependence diagnosis. Thus, substance abuse, one of the 'Moderate Four,' risk factors may play a more important role in the treatment of the seriously mentally ill offender.

# How Does Mental Health Treatment Fit In?

As alluded to above, reducing the risk of recidivism and improving mental health functioning should be seen as distinct but related goals. That is, mental health treatment alone does not reduce the risk to engage in future criminal behavior and decreasing risk may not improve mental health (Andrews & Bonta, 2006; Bonta et al., 1998; Case et al., 2009; Morgan et al., 2010; Rice & Harris, 1997; Steadman et al., 2009). Yet, little research exists that details how mental health treatment should be combined with treatment of criminogenic need. The debate on the how these two distinct goals should intertwine and who should be responsible for that treatment appears to be one of ethical consideration. Andrews and Bonta (2006) argued that while "offenders have the right to the highest-quality service for other needs," traditionally these needs are "not the primary focus of *correctional* rehabilitation" (p. 49). The authors stated mental health needs are appropriate targets for criminal justice treatment if they interfere with an individual's ability to engage in treatment (responsivity factors).

There is, however, no empirical evidence that can be used to suggest a best practice for how to address mental health problems as responsivity factors. That is, it remains unclear how extensive mental health interventions should be if the goal is to manage mental health symptoms that pose a potential to interfere with treatment for criminogenic need. Nevertheless, some researchers have suggested frameworks to assist programs in addressing this gap in the literature. Prins and Draper (2009) and Skowyra and Cocozza (2007) detail similar frameworks, where the level of mental health intervention should correspond to an individual's level of functioning or severity of symptoms. For example, if on an assessment tool an individual is found to be 'low' in mental health problem severity, minimal, if any, intervention will be necessary. Inversely, an individual who is very low functioning will require more intensive interventions, using evidenced based practice for the specific mental illness (California Corrections Standards, 2011), to stabilize the individual to a level sufficient to engage in treatment for criminogenic need.

Still others argue to only address mental health needs as they interfere with treatment for criminogenic needs is unethical (P. Robertson et al., 2011) and can become a violation of an individual's rights if an individual is incarcerated and has no other access to mental health treatment (Cohen, 2008). Blackburn (2004) highlighted a dichotomy between 'offense focused' and 'offender focused' treatment. The former includes models such as RNR that focuses on the community as the client, with the simple goal of risk reduction. Conversely, in offender focused treatment it is a clinician's obligation to focus on the needs of the individual they are treating. Blackburn (2004) suggested a balance between these two approaches is ideal in treating offenders with mental illness.

#### Need for Collaborative and Comprehensive Programming

With the often differing goals of the criminal justice system and mental health/substance abuse systems, many researchers have emphasized the necessity of collaborative efforts (Cocozza, Skowyra, & Office of Juvenile Justice and Delinquent Prevention, 2000; Hartford et al., 2006; Osher, Steadman, & Barr, 2003; Ryan et al., 2010; A. Wilson & Draine, 2006). This would require a clarification of the roles and responsibilities of each system, forming complementary treatment efforts, and agreeing upon common goals. In a report by the California Corrections Standards (2011), the position is taken that, "the responsibility for the youth in custody who have mental health problems is shared among multiple agencies and individuals. Courts, custody,

health and mental health staff, substance abuse, school and social services/child welfare personnel all have important roles to play, as do family members and community support providers. No one agency has all the answers or all of the best approaches. Mentally ill youth in custody present complex, multi-layered problems which demand collaborative, multi-agency solutions" (p. i).

In terms of the RNR model, this may mean treatment for criminogenic needs could be provided and funded by the criminal justice system and adjunct mental health treatment could be provided by community mental health providers as the two systems collaborate to work toward integrated treatment. For example, Skowyra and Cocozza (2007) suggested the juvenile justice system is responsible for mental health treatment while a mentally ill youth is placed in a secure setting; however, the authors emphasized youth with mental illness should be diverted into or referred to community based mental health treatment facilities where possible. In community treatment programs, Skowyra and Cocozza (2007) posited, youth can be provided with high quality and more cost effective mental health treatment. Additionally, this community mental health treatment can be supplemented with criminal justice supervision.

Regardless of the role and responsibility placed on each system, many researchers stress the importance of having staff who are trained and experienced in the areas of both criminal justice and mental health (National Institute of Corrections, 2004). For example, it is suggested clinicians who work with offenders with mental illness be trained and experienced in understanding the importance of targeting criminogenic needs (Andrews & Bonta, 2006) and for criminal justice officers to be trained in recognizing mental health symptoms and to respond appropriately (Draine & Solomon, 1999; Lattimore, Broner, Sherman, Frisman, & Shafer, 2003; Walsh & Holt, 1999).

In addition to collaboration, a comprehensive approach is also recommended (Baillargeon, Hoge, & Penn, 2010; Loveland & Boyle, 2007; Lurigio, 2001; Martin, Dorken, Wamboldt, & Wootten, 2011; The Sentencing Project, 2002). This would include having liaisons or boundary spanners and information sharing, both within points of the criminal justice system and between the criminal justice system and mental health agencies. For example, Osher et al. (2003) reviewed a program in Arizona, "where an information linkage system has allowed the early identification

of inmates with a history of mental health treatment in the public mental health system" (p. 87). This early identification has led to more timely and efficient interventions.

It is also suggested treatment throughout each stage or point of contact in the criminal justice system be linked or include liaisons, which can provide continuity and smooth transitions for offenders who are transferred through the system. In a meta-analysis of interventions for offenders with mental illness, Martin et al. (2011) found many of the programs with the largest effect sizes included services within the community, that provided transitional services in or out of secure institutions, such as forensic hospitals, jails, and prisons. Additionally, many of the promising innovative community reentry programs have included services that began in prisons (Arnold-Williams et al., 2008; Buck et al., 2011; Burke & Keaton, 2004; Phipps & Gagliardi, 2002) and continue while the offender reintegrates in the community. More studies are needed in this promising area of transitional, boundary spanning, and integrated programs for meanly ill offenders.

Lastly, while it is not ideal individuals with severe mental illness become involved in the criminal justice system, researchers have found that without a legal intervention mandating treatment, many of these individuals may not comply with treatment (Lamb et al., 2004; Martin et al., 2011). Martin et al. (2011) found programs that were 'somewhat or completely voluntary' were more effective than programs that were 'involuntary;' however, programs that were 'somewhat voluntary' (p. 5). Thus, some leverage may be required to gain an optimal level of compliance.

To address this need for collaboration and comprehensive treatment for juvenile offenders with mental illness, Skowyra and Cocozza (2007) have proposed the following framework (Table 1) for the collaboration between juvenile justice systems (JJS) and mental health systems (MHS). It is important to note that while this framework, and similar models, can be helpful in guiding program design, additional research is needed to demonstrate the efficacy of such frameworks. Problem solving courts, like mental health courts, that promote therapeutic jurisprudence may be especially well-situated to provide some incentive without being overly punitive.

Table 1		
Summary of Foundations for Identification & Treatment of Juvenile Offenders		
Note. Adapted f	rom Skowyra and Cocozza (2007, p. 20-44)	
	1. Full recognition of mental illness in juvenile offenders for both JJS and MHS	
	2. Collaborative and comprehensive planning among JJS and MHS	
	3. Inclusion of family members & care givers in planning process	
Collaboration	4. Identification of joint funding mechanisms to implement strategies	
	5. Collaboration at all stages of process (not just beginning or end)	
	6. Joint evaluation of programs and services to ensure needs being met	
	7. Cross training of staff between JJS and MHS	
	1. Systematically screening all youth in contact with JJS	
	2. Identification of those in need of emergency services or general assessments	
	3. Access to emergency services for youth screened and needing immediate care	
	4. Full assessments as indicated from screenings for youth in need	
	5. Use of only standardized and validated instruments	
Identification	6. Mental health screenings performed in conjunction with risk assessments	
	7. Screenings and assessments should be administered by appropriately trained staff	
	8. Protection of pretrial mental health information to protect legal interests of youth	
	9. Routine assessments at critical intervention points	
	10. Integration of co-occurring substance abuse needs in screenings and assessments	
	11. Adaptation of screening and assessment tools for marginalized populations	
	1. Diversion to community treatment whenever possible	
<b>D</b>	2. Standardized procedures to assess those appropriate for diversion	
Diversion	3. Effective community based services for those who are diverted	
	4. Methods for diversion at all key decision-making points of processing	
	5. Regular evaluation to ensure both treatment goals and community safety	
	1. Employing evidence based treatment regardless of the setting	
	2. Sharing of treatment responsibility by JJS and MHS, varying by point of contact	
T	3. Employing or contracting qualified mental health professionals for JJS cases	
Treatment	4. Full involvement of families in rehabilitation process	
	5. Creation of environments sensitive to trauma-related histories of many youth	
	6. Increased research to enhance culturally sensitivity	
	7. Discharge planning to ensure the appropriate continuation of mental health services	

# **Intervention Points/Points of Contact**

The Sequential Intercept Model is a framework developed to help bridge gaps in criminal justice and mental health systems (Munetz & Griffin, 2006). The authors defined each 'intercept,' or point in contact, as a place in which an intervention, either by the criminal justice system or mental health system, can take place to "prevent individuals from entering or penetrating deeper into the criminal justice system" (Munetz & Griffin, 2006, p. 5). Intercept 1 refers to prearrest diversion programs. Pre-arrest diversion can be done through the use of police officers or emergency services. Intercept 2 refers to post-arrest diversion and can include mental health screenings after arrest, initial court, or detention hearings. Intercept 3 refers to jail and court diversion. This can include treatment programs within jails and court programs, such as mental health court. Intercept 4 refers to reentry from hospitals, jails, or prisons. This should include programs that create continuity between incarceration and the community, including not only mental health treatment, but other social services, such as housing and employment. Intercept 5 refers to community correctional treatment, such as probation and parole. This would include probation and parole officers to connect offenders with services and supervise compliance. The authors suggested interventions at each of these points can create continuity in services and prevent offenders with mental illness from returning to the criminal justice system.

# **PART III: Existing Programs**

The following section details various research studies on programs at different intercepts or points of contact in the criminal justice system. This information can be used by individual agencies to review the research relevant to the point of contact the agency is interested in and use the information to assist modifying or designing treatment programming.

# Assessment of Offenders with Mental Illness

Assessment of offenders with mental illness should be done at each point of contact (Skowyra & Cocozza, 2007). The National Institute of Corrections (2004) highlighted the importance of screening inmates for mental health and substance abuse concerns with the purpose of identifying "those who are at risk for injuring themselves or others," determining "whether an inmate is capable of functioning in prison," also determining "whether an inmate should be transferred to a mental health facility," and "whether an inmate can benefit from treatment at prison" (p. 13). The NIC (2004) also emphasized that these screenings should take place immediately to provide offenders with timely interventions.

The America Psychiatric Association (APA) created guidelines on assessing inmates in jails and prisons (APA, 2000; as cited in NIC, 2004). These guidelines include the need for observation of offenders as well as structured interviews, interviewing at the time of admission, and that screening be conducted by a qualified mental health professional or trained correction staff. Additionally, if indicated in the screening process, the APA recommends further comprehensive assessment.

Similarly, the National Commission on Correctional Health Care (NCCHC, 1999, as cited in NIC, 2004) created guidelines for mental health assessment of inmates. These guidelines include screening within two hours of admission by a professional or technical worker certified by the state and a mental health evaluation be completed by qualified health care personnel within 14 days of admission. Due to the potential of not identifying offenders with mental illness in screenings, it has been further recommended staff be trained on recognizing the signs and symptoms of mental illness (NIC, 2004). The NCCHC (1999, as cited in NIC, 2004) outlined the following elements as being critical to include in the mental health assessment: psychiatric history, current use of psychotropic medications, current suicide ideation, history of suicidal

behavior, current and prior drug and alcohol use, history of sex offenses, history of violent behavior, history of being victimized by criminal violence, history of educational placement, history of seizures or cerebral trauma, emotional response to being incarcerated, and intelligence testing for mental retardation (NIC, 2004, p. 16).

A review of the literature revealed there are a multitude of mental health screening and assessment tools available. Based on the work of Lambert, Davis, Morton, and Williams (2002), the following framework has been developed to guide individual agencies on how to choose an assessment tool that is appropriate for the agency, based on the role and needs of the agency.

- 1. Understand the purpose of the tool. What is the tool designed to measure?
- 2. Understand the scoring of the tool. For example, does the tool give cut off scores that provide a defined level of the construct it is measuring?
- 3. Understand the point of view of the tool. Is the tool filled out by the client, family members, outside observer, or clinician? This is of particular importance as juvenile and adult offenders may deny or minimize, or inversely, fabricate or exaggerate their mental health symptoms (Fagan & Ax, 2003). It is noted this deception might be purposeful or unintentional on behalf of the offender.
- 4. Evaluate if the tool is appropriate for use with the population at individual agencies. This includes whether or not the tool has been normed on factors such as age, gender, and language of the population to be assessed by an individual agency.
- 5. Ensure the tool has been validated. Do you have access to information regarding the validity and reliability of the tool?
- 6. Other considerations for implementation. What is the cost and ease of administration (paper versus computer).

The following is a summary of two commonly used risk tools, one adult and one juvenile. It is important to bear in mind that risk tools are used to decide what level of interventions are appropriate for an individual. Low-risk individuals are at a low-risk for future criminal conduct and should receive no or minimal interventions; whereas high-risk individuals are at a high-risk for future criminal involvement and usually require intensive and extensive intervention.

Name: Level of Service Inventory-Revised (LSI-R)

Author: Don Andrews and James Bonta (Multi-Health Systems, Inc., n.d.)

- *Description:* The LSI-R consists of eight domains, with a total of 54 items used to assess an offender's risk of future criminal behavior based on static and dynamic risk factors (Lowenkamp, Lovins, & Latessa, 2009).
- *Purpose:* The LSI-R can be used to determine the level of supervision, level of interventions, level of treatment and level of security required for an individual.
- *Scoring:* The LSI-R takes approximately 30 to 45 minutes to score and can be hand or computer scored. This results in distinct cut off scores of low, moderate, or high.
- *Point of view:* The LSI-R can be scored by correctional staff, with information gathered through a structured interview (Lowenkamp et al., 2009).
- Norms: The LSI-R has been normed on male and female offenders, ages 16 and older.

Psychometrics properties: The authors have published the reliability and validity of the LSI-R In the tool's manual. In addition, many other researchers have conducted independent analysis and found the tool has acceptable psychometric properties (Holsinger, Lowenkamp, & Latessa, 2006; Kelly & Welsh, 2008; Lowenkamp et al., 2009; Schlager & Simourd, 2007)

Name: Protective and Risk Assessment (PRA)

- *Author:* Based on the Wisconsin Risk Scale and the Washington State Juvenile Court Assessment.
- *Description:* The PRA consists of ten domains, with a total of 91 items used to assess a youth's risk of future criminal behavior based on static and dynamic risk factors.
- *Purpose:* The PSRA can be used to determine the level of supervision, level of interventions, and level of treatment required for an individual.
- *Scoring:* The PSRA takes approximately 45 minutes to one hour to complete and can be scored by hand or computer. This results in distinct cut off scores of low, moderate, or high.
- *Point of view:* The PRA can be scored by probation officers or case manager with information gathered through an interview, collateral contacts, and criminal history data.
- *Norms:* The PRA has been normed on juvenile offenders up to 17 years of age in the State of Utah.
- *Psychometrics properties:* Researchers have determined the tool has acceptable psychometric properties (Washington State Institute for Public Policy, 1998; Washington State Institute for Public Policy, 2004).

Again, in choosing a risk tool it is important tool provide distinct cut off scores (i.e., low-risk, moderate-risk, high-risk), the tool be scored by a staff within the criminal justice or mental health systems, be normed on the indicated population (based on factors such gender, age, etc.), and have an acceptable level of predictive validity.

Additional risk tools, some of which are used to determine specific risk, such as risk of violence, found in the literature include: the Short-Term Assessment of Risk and Treatability (START, Version 1.1, Webster, Martin, Brink, Nicholls, & Desmarais, 2009), Structured Assessment of Protective Factors for Violence Risk (SAPROF; de Vries Robbe, de Vogel, & de Spa, 2011), Hare Psychopathy Checklist, Revised (PCL-R, Hare, 2003), Historical-Clinical-Risk Management-20 (HCR-20, Douglas & Reeves, 2010), Violence Risk Scale (VRS; Wong, Gordon, & Gu, 2007), Historical, Clinical, and Risk Management Scales (HCR-20, N. Gray et al., 2004), Offender Group Reconviction Scale (ORGS; N. Gray et al., 2004) and Violence Risk Appraisal Guide (VRAG, Quinsey, Harris, Rice, & Cormier, 2006).

The following is a brief review of mental health assessment tools, also selected to provide examples of how to choose an assessment tool appropriate for the goals and needs of an individual agency. As stated above, mental health should be considered a responsivity factor and should be targeted in treatment as they may impair an individual's ability to participate in treatment for criminogenic needs. Additionally, the mental health screenings and assessments can also be used to guide supplemental services where the goal is improving mental health (Grisso, Underwood, & National Center for Mental Health and Juvenile, 2004).

*Tool:* Brief Jail Mental Health Screen (BJMHS)

Developer: Policy Research Associates and National Institute of Justice

Description: The BJMHS is an eight item screening tool for offenders.

- *Purpose:* This tool is designed to be used as a screening tool to identify adults with serious mental illness as they enter correctional facilities. The offenders can then be identified for further mental health assessment.
- Scoring: The BJMHS is administered with paper and hand-scored and can be completed in less than three minutes (Substance Abuse and Mental Health Services Administration, n.d.).

Point of view: The BJMHS is scored by correctional staff.

Population: This tool can be used with male and female adult offenders.

*Psychometrics properties:* The BJMHS has been found to have acceptable psychometric properties (Steadman, Robbins, Islam, & Osher, 2007; Steadman, Scott, Osher, Agnese, & Robbins, 2005).

*Tool:* The Massachusetts Youth Screening Inventory-Second Version (MAYSI-2) *Developer:* National Youth Screening Assistance Project

*Description:* The MAYSI-2 is a 52-item tool, used to screen youth entering juvenile justice facilities for alcohol and drug use, suicide ideation, somatic complaints, traumatic experiences, thought disturbance, anger-irritability, and depression-anxiety

- *Purpose:* This tool is designed to be used as a screening tool in identifying youth with mental health needs.
- *Scoring:* The MAYSI-2 can be administer by computer or by paper in under 15 minutes. If administer by paper, the information is scored using a template.

Point of view: The MAYSI-2 is a self-report instrument.

- *Population:* The MAYSI-2 can be used with youth ages 12-17 and is available in English and Spanish.
- *Psychometrics properties:* The MAYSI-2 has been found to have acceptable psychometric properties (Archer, Simonds-Bisbee, Spiegel, Handel, & Elkins, 2010; Archer, Stredny, Mason, & Arnau, 2004; Ford, Chapman, Pearson, Borum, & Wolpaw, 2008).

*Tool:* The Voice Diagnostic Interview Schedule for Children (V-DISC) *Developer:* Shaffer, David and Wasserman, Gail

Description: The V-DISC can be used to assess a youth for possible DSM-IV diagnoses.

*Purpose:* This tool can be used to highlight mental health concerns and direct mental-health treatment.

- *Scoring:* The V-DISC is computer administered and takes approximately one hour. The results produce a provisional diagnosis as well as level of impairment and clinically significant symptoms via a computerized report (Grisso, 2004; Wasserman et al., 2004).
- *Point of view:* The V-DISC is a computerized interview in which youth respond to questions using a key board.
- *Population:* The V-DISC has been normed on youth ages 9-17 and is available only in English; however, paper versions are available in Spanish.
- *Psychometrics properties:* The tool has been found to have acceptable psychometric properties (Grisso et al., 2004; Wasserman et al., 2004).

There are many other mental health screening and assessment tools, which can be chosen to meet the needs and goals of each agency. There are a vast number of mental health screening and assessment tools, the following is a list of a few which have been used in criminal justice settings: Camberwell Assessment of Need (CANFOR; Thomas et al., 2008), Kessler Psychological Distress Scale-10 (Slade, Grove, & Burgess, 2011), Co-Occurring Disorders Screening Instrument for Mental Disorders (CODSI-MD; Sacks et al., 2007), Mini-International Neuropsychiatric Interview (Sacks et al., 2007), Mental Health Screening Form (MHSF; Sacks et al., 2007), Outcome Questionnaire (OQ; Lambert, Hansen, & Harmon, 2010), Brief Symptom Inventory (Meijer, de Vries, & van Bruggen, 2011), Brief Psychiatric Rating Scale (Bark et al., 2011), the Children's Global Assessment Scale (C-GAS; Canino, 1999), Columbia Impairment Scale (CIS; Canino, 1999), Child and Adolescent Psychiatric Assessment (CAPA; Canino, 1999), Child Behavior Checklist (CBCL; Althoff, Ayer, Rettew, & Hudziak, 2010), Million Adolescent Clinical Inventory (MACI; McCann, 2000).

Again, when considering a mental health screening tool, it is important the tool assess overall mental health and level of symptom severity. However, other tools, such as those that provide diagnostic clarity or assessment for psychotic symptoms may also be helpful. If client scored tools are being used without other points of view, it would be beneficial to use a tool such as the Minnesota Multiphasic Personality Inventory (MMPI-2 or MMPI-A), which has scales or validity measures that are included for the purpose of detecting deception; though tools such as this are often costly and require trained mental health personnel to interpret the results (Fagan & Ax, 2003).

In review, the risk tools should be used to determine the level (intensity and extensiveness) of treatment and mental health screening and assessment instruments should be used for safety and treatment planning in conjunction with the risk instruments. These tools can also be used to determine the level of supervision or case management needed. The brief mental health screenings and assessments must be ld be used to identify offenders with serious mental illness, to identify responsivity factors, and assist in directing mental health treatment goals where supplemental mental health treatment is needed.

#### **Medication Management of Offenders with Mental Illness**

Medication management should be considered in the treatment of offenders with mental illness at each point of contact within the criminal justice system. Pharmacotherapy has been noted to be the primary treatment method for incarcerated offenders with serious mental illness (Blackburn, 2004; R. Gray, Bressington, Lathlean, & Mills, 2008; Thorburn, 1995, as cited in Shelton, Ehret, Wakai, Kapetanovic, & Moran, 2010), and adherence to a medication regimen is associated with decreased psychiatric symptoms and lower rates of relapse (Leucht et al., 2003, as cited in Shelton et al., 2010).

In a review of the literature on medication management of offenders with mental illness, Shelton et al. (2010) noted researchers have found non-compliance with pharmacotherapy has been linked to increased recidivism, increased hospitalization, longer prison sentences, and serious felony convictions. Additionally, many researchers have found an association between non-compliance with medication and violent behavior (Alia-Klein, O'Rourke, Goldstein, & Malaspina, 2007; Shelton et al., 2010; L. D. Smith, 1989; Solomon, Draine, & Marcus, 2002;

Swanson, Van Dorn, Monahan, & Swartz, 2006). According to Lattimore et al. (2003), "Individuals with co-occurring mental illness and substance abuse who are noncompliant with medication have a threefold increase in risk for arrest and are significantly more likely to be at risk for violent behavior" (p. 31).

In light of these findings, the majority of research on pharmacotherapy and offenders with serious mental illness has focused on reasons for non-compliance. In a review of the literature, R. Gray et al. (2008) summarized factors related to adherence in the following six categories: 1) illness-related, including insight and psychotic symptoms, 2) treatment-related, including methods for administration and treatment efficacy, 3) clinician-related, including therapeutic alliance, problems with access and medication reviews, 4) patient-related, including age, gender, beliefs of treatment, perception of illness, 5) environmental-related, including family beliefs and peer pressure, and 6) cultural-related, including ethnic background (p. 337). These factors are noted to be similar to factors observed in non-offender populations with serious mental illness (Perkins et al., 2006).

In an exhaustive review of the literature related to medication compliance interventions in the general population, Haynes, Ackloo, Sahota, McDonals, and Yao (2008) concluded:

Many people do not take their medication as prescribed. Our review considered trials of ways to help people follow prescriptions. For short-term drug treatments, counseling, written information and personal phone calls helped. For long-term treatments, no simple intervention, and only some complex ones, led to improvements in health outcomes. They included combinations of more convenient care, information, counseling, reminders, self-monitoring, reinforcement, family therapy, information, counseling, reminders, self-monitoring, reinforcement, family therapy, psychological therapy, mailed communication, crisis intervention, manual telephone follow-up, and other forms of additional supervision or attention. Even with the most effective methods for long-term treatments, improvements in drug use or health were not large (p. 2).

Zygmunt, Olfson, Boyer, and Mechanic (2002) conducted a review of medication adherence in patients with schizophrenia, which included non-offending populations. The authors found,

"Models of community care such as assertive community treatment and interventions based on principles of motivational interviewing are promising" (p. 1653). The authors also suggested the following tools are helpful in improving adherence: concrete instructions, problem-solving strategies (reminders, self-monitoring tools, cues), and booster sessions.

Farabee, Shen, and Sanchez (2004), highlighted that the majority of research on adherence has focused on the individual's use of medication rather than program-level factors influencing the individual. In their 2004 study, the researchers suggest educating a member of the patient's family on the nature of their disorder as well as education on the treatment regimen and side effects were recommended in conjunction with the possibility of prescribing medications with lower levels of side effects in general. They emphasize these program-level interventions may serve to increase adherence. However, Kravitz, Davis, and Silberberg (2001) warn the expeditious rate of release of detainees from some secured facilities can make ongoing treatment planning on a programmatic level impractical.

No research studies were found that demonstrated empirical models for increasing e medication adherence. Nevertheless, based on research identifying factors related to nonadherence, Shelton et al. (2010) proposed the following guidelines for correctional facilities to assist in increasing adherence. First, the authors recommend correctional facilities conduct an intake assessment to identify any barriers to adherence, such as the factors identified above by R. Gray et al. (2008). These identified individuals can then be targeted with educational, supportive, or motivational interventions to improve adherence, though the authors note psychoeducational interventions are not effective unless they are used in conjunction with other interventions. Strategies such as cognitive behavioral interventions, skills training, motivational interviewing, building therapeutic alliance, medication diaries, calendars, and visual cues may be helpful to increase adherence, though, "Such strategies need to be defined and tested within the correctional setting" (Shelton et al., 2010, p. 610).

# **Diversion Programs**

Diversion programs have become increasingly more common and generally have had the goal of reducing the proportion of offenders with mental illness in jails and prisons (Broner, Mayrl, & Landsberg, 2005). These programs have proliferated due to the belief that, "individuals who

come into contact with the criminal justice system because of behaviors that are more reflective of mental illness than criminality need mental health treatment, not arrest" (Boccaccini, Christy, Poythress, & Kershaw, 2005, p. 1).

Diversion can occur at multiple points of contact in the criminal justice system, but are broadly categorized as prebooking or postbooking diversion (Gordon, Barnes, & VanBenschoten, 2006; Steadman, Morris, & Dennis, 1995). Additionally, each of these categories contains subsets of diversion programs, which will be further discussed in the sections below. It is important to note that though diversion programs have generally had the common goal of diverting offenders with mental illness from the criminal justice system and into community treatment programs, the mission and definition of diversion programs goals matched the aforementioned goal, while one program cited public safety as a primary concern, and one focused on keeping offenders with mental illness out of correctional institutions to prevent "…overcrowding and disruption" (p. 1634). The following is a summary of current research of prebooking and postbooking diversion programs.

#### Adult Prebooking Diversion

To differentiate between diversion at different points of contact, diversion that takes place prior to an individual with mental illness being taking into custody is commonly referred to as prebooking diversion (Draine & Solomon, 1999; Hartford et al., 2006; Lattimore et al., 2003). As a result of the heterogeneity between prebooking services, some researchers and practitioners alternatively refer to such services as 'liaison' services (Scott et al., n.d.).

Prebooking diversion can include interventions prior to an individual engaging in illegal behavior or diversion after an arrest has been made; though most diversion interventions result with the individual being referred to a community mental health program or provider (Draine & Solomon, 1999). Individuals who are diverted at this point in contact have typically engaged in minor, non-violent crimes (Draine & Solomon, 1999; Epperson et al., 2011; Lattimore et al., 2003) Police involved in prebooking diversion are often trained to recognize the signs and symptoms of mental illness, as well as substance use, and are aware of appropriate local referrals (Bonta et al., 1998; Draine & Solomon, 1999; Epperson et al., 2011; Lattimore et al., 2003; Walsh & Holt, 1999).

Police are often the first responders when there is an incident with an individual with mental illness (Lamb et al., 2004). One report indicated that police officers "spend more time managing incidents related to persons with [serious mental illness] than they do responding to traffic accidents, burglaries, or assaults (Cordner, 2006, as cited in Epperson et al., 2011, p. 4). The decision to arrest or to divert to mental health services then becomes the responsibility of the police officer (Green, 1997; Lamb et al., 2004). The police may encounter multiple difficulties when dealing with these individuals. In a recent survey, 29.3% of officers indicated they found it concerning to arrest individuals with a mental illness due to the fact that, "The officer must move such prisoners through arrest processing using minimal force, though they may be incoherent, uncooperative, or belligerent" (Linn, 2009, p. 79). Additionally, if the officer must transport the individual to an emergency room, this may require them to sit with the individual in an unsecure settings for multiple hours (Lamb et al., 2004; Linn, 2009). As a result, Lamb et al. (2004) purported, "On the other hand, the police are well aware that if they refer a psychiatric case to the criminal justice system, the offender will be dealt with in a more systematic and predictable way...Thus, arrest is a response with which police are familiar, one over which they have more control, and one that they believe will lead to an appropriate disposition" (p. 112).

Few research studies on the outcomes of prebooking jail diversion programs with offenders who have serious mental illness were found. Researchers point out that research is difficult to conduct due to the ethical challenges associated with randomizing mentally ill research subjects (Draine & Solomon, 1999; Watson, 2010), that diversion program are extremely heterogeneous (McGuire & Bond, 2011), and that there are not agreed upon outcomes, such as treatment compliance, mental health outcomes, community integration and criminal recidivism (Hartford et al., 2006). Nevertheless, the following is a summary of the literature, which is primarily descriptive, of prebooking diversion services with individuals who have serious mental illness.

One study found police officers often handle situations involving individuals believed to have a mental illness informally, where no formal referral is made, in 72% of incidents (Green, 1997, as cited in Teplin, 2000). Only 16% of incidents resulted in arrest and 12% in hospitalizations. Another study found police officers tended to have negative attitudes toward individuals with

mental illness; which has led researchers to suggest training be provided to police officers to enhance knowledge and reduce bias (Cotton, 2004, as cited in Hartford et al., 2006). Researchers have found mixed results on attitude changes and increased knowledge by police officers who have been through the training versus those who had not (Hartford et al., 2006). However, one study of a Chicago based crisis intervention team (CIT) found officers who had received training were significantly more likely to refer individuals to mental health services than non-trained officers (Watson, 2010).

A descriptive survey of prebooking diversion programs found some police departments had access to drop-off crisis centers (Deane, Steadman, Borum, Veysey, & Morrissey, 1999). This drop-off method reduced the time spent with the individuals with mental illness after an incident and agencies that had access this service self-rated their effectiveness as higher than agencies that did not. Additionally, some researchers have suggested 'no refusal' policies are also beneficial (Teplin, 2000). These policies regulate that an individual cannot be turned away due to the symptoms of their mental illness or the nature of the criminal conduct. Steadman et al. (2001) described the no refusal policies as helpful because, "police will not be deterred from transporting a person to the crisis center if they have concerns that the person will not meet the criteria for mental health services" (p. 221).

Broner, Lattimore, Cowell, and Schlenger (2004) conducted a quasi-experimental study of three prebooking diversion programs and reported outcomes at 3 and 12 months post-diversion. Overall, the diverted subjects were more likely to be engaged in some type of treatment and have an emergency room visit than nondiverted subjects; however, this varied greatly by diversion site. There was no difference observed in drug and alcohol use and no differences in rearrest, with the exception of one site where it was found diversion was associated with increased likelihood of future arrest. Improvement in mental health symptoms was observed in only one of the three sites. Using the same data set but collapsing the data across cites, Steadman and Naples (2005) found diverted individuals spent more time in the community, more frequently visited the emergency room and were hospitalized, used medication, and were slightly more engaged in treatment at 12 months; however, non-diverted subjects reported more residential treatment. Steadman and Naples (2005) found no differences in rearrest and no difference in improved mental health status.

In some areas, in addition to providing training for police officers, some agencies have developed crisis intervention teams (CIT) as a method of prebooking diversion. CITs typically consist of teams of police officers, or interdisciplinary teams, who receive specialized training in recognizing mental illness and knowledge of community resources (Cochran, Deane, & Borum, 2000; Dupont & Cochran, 2000; Hartford et al., 2006). Most CITs have the goal of resolving "the situations without the use of hospitalization or arrest" (Epperson et al., 2011, p. 4).

One study compared CITs in Birmingham, Alabama, Memphis, Tennessee, and Knoxville, Tennessee (Steadman, Deane, Borum, & Morrissey, 2000). The three cities varied in the design and structure of the teams. The CIT in Birmingham was made up of police officers, who dressed in civilian clothing and drove unmarked cars. These officers attended a six-week classroom and field-training program. It was the job of this team to respond to a variety of social services calls, primarily related to mental health, but also included domestic violence calls and calls for transportation and shelter. In Memphis, the CIT consisted of police officers who responded to mental health calls and attended to their regular patrol duties. These officers attended a 40-hour training taught by mental health providers, advocates, and consumer groups, where they were trained to assess and diffuse a situation and then transport the individual to the University of Tennessee psychiatric emergency services. In Knoxville, the CIT was made up of nine police officers who responded in two-person teams, the article did not describe the training received by these officers. A comparison of these three programs revealed all three had low arrest rates, the highest being Birmingham, at 13%. The Memphis CIT responded to a statistically significantly higher number of cases and more often transported individuals directly to a psychiatric facility. Birmingham CIT more often resolved the situation on the scene and Knoxville provided a referral to treatment. Steadman et al. (2000) suggested the availability of the CIT team members and "no-refusal" policy at a crisis center allowed the Memphis CIT to respond the highest volume of calls and transfer individuals directly to services.

Other studies have found the use of CIT teams increased the identification of cases that involved an individual with a mental illness (Strauss et al., 2005; Teller, Munetz, Gil, & Ritter, 2006); however reductions in arrest rates were not always found (Teller et al., 2006).

Researchers have noted there are a multitude of problems encountered by prebooking diversion programs. For example, some voiced concerns an individual may feign mental illness to avoid

arrest (Epperson et al., 2011). Others have pointed out practical difficulties of prebooking diversion programs. Without a 'no-refusal' policy, psychiatric facilities have the right to refuse treatment to an individual who is considered dangerous (Teplin, 2000) and some have reported there is a lack of available mental health services in which to refer (Walsh & Holt, 1999). Additionally, a police referral to mental health services does not meet the threshold for involuntary services and many individuals with mental illness refuse treatment (Steadman et al., 2001).

There is a lack of sufficient empirical research to suggest prebooking diversion as best practice, though some researchers have suggested preliminary evidence for CITs is promising (McGuire & Bond, 2011). In regard to other prebooking diversion programs, only two studies could be found comparing outcomes of prebooking divertees to comparison groups and, as stated above, the studies utilized the same data (Broner et al., 2004; Steadman et al., 2001). Nevertheless, based on preliminary studies of diversion programs, Hartford et al. (2006) suggested the following four elements in common among programs that were 'perceived' to be successful: all relevant mental health and criminal justice agencies were involved in program development, representatives of the various agencies held regular meetings, drop-off center with a no-refusal policy for police cases was created, a liaison person or boundary spanner (an individual who coordinates efforts among the various agencies) was appointed. Steadman, Morris, and Dennis (1995) also highlighted the importance of specialized case managers who are experienced in both mental health and criminal justice practice.

#### Juvenile Prebooking Diversion

Few articles could be found that reviewed efficacy of CIT with juveniles. Doulas and Lurigio (2010) provided a descriptive review of Youth Crisis Intervention Teams (YCIT) in three U.S. cities: Denver, Chicago, and San Antonio. YCITs at each location involved a minimum of a 40-hour training for the teams, which were made up of either school resource officers or field officers. The trainings were designed to teach the officers how to recognize and respond to the mentally ill youth and often provided a referral to a mental health agency.

Skowyra and Cocozza (2007) reviewed a similar program in New York, called the Emotionally Disturbed Persons Response Team (EDPRT). The authors reported this program included an 80-

hour training for responding officers. Most of the referrals were made from schools and families to which the team responded and provided referrals when necessary. Skowyra and Cocozza (2007) reported the program decreased arrest rates and use of force; however, the annual report detailing those outcomes could not be located.

It is noted no outcome evaluations of YCIT's or similar programs could be found. Thus, there is insufficient evidence to suggest these programs as best practice for juvenile prebooking diversion. Nevertheless, many of the adult recommendations above may be applicable and useful in juvenile program design, though further research and evaluation is necessary.

## Adult Postbooking Diversion

Postbooking diversion is the process of diverting an offender with mental illness away from incarceration and into treatment services (Broner et al., 2004). Postbooking diversion can take place after an individual has been arrested and booked into jail, in lieu of prosecution, or as part of the court process, as a condition for reduced punishment (Lange et al., 2011). It appears postbooking diversion has been more successfully studied than prebooking diversion; nevertheless, after a review of available literature, Ryan et al. (2010) concluded, "research has not kept up with practice in the area of postbooking diversion," (p. 472).

Broner et al. (2004), looked at five postbooking diversion programs and compared diverted subjects with nondiverted subjects; it is noted participants in the studies were not randomized. The researchers found utilization of mental health treatment services differed by programs and almost none of the diverted individuals were participating in substance abuse treatment at a 12 month follow-up for both groups. Similarly, outcomes on the use of drug and alcohol were mixed across sites. Overall mental health status did not differ between the groups, with the exception of an increase in mental health symptoms in one diverted group. The researchers suggested outcomes are more related to the treatment interventions received than a generic diversion process.

Broner et al. (2005) analyzed the outcomes of jail diverted offenders with mental illness and cooccurring drug and alcohol problems. Subjects included court mandated and nonmandated groups. The researchers found individuals in the mandated group had significantly more days in the community and less days in prison than the nonmandated and comparison groups. Those in

the mandated track were also more likely to receive residential or community treatment and have decreases in drug use than the nonmandated and comparison groups. Interestingly, whether in the mandated or nonmandated group, individuals who did not believe the treatment was coerced and had insight regarding their mental illness and recognized a need for treatment spent significantly more days in residential treatment and had decreased arrest for misdemeanor offenses than those who perceived themselves as being coerced and with low insight. Noncompliance with medication was associated with increased time in jail, risk for violence, and acute symptoms. Treatment, not including medication, had no effect on mental health outcomes or quality-of-life measures. Broner and colleagues (2005) concluded the findings demonstrated, "modest benefits for general jail diversion but additional positive outcomes for criminal justice, substance abuse, mental health, and treatment variables when more structured, court-involved, diversion models are applied" (p. 44).

In a retrospective study of diverted offenders with mental illness, Hoff, Baranosky, Buchanan, Zonana, and Rosenheck (1999) analyzed the differences between a diverted and a comparison group of subjects who were eligible, but not diverted. The two groups were similar in gender, and age, but differed significantly on diagnosis and offenses. The diverted group was more likely to have a dual diagnosis and were more likely to be arrested for more serious minor crimes, defined as Class D Felony or Class A, B, and C misdemeanors. Regarding time in the community, the researchers found jail diversion decreased time in jail; however, jail diversion did not impact the offenders with mental illness equally when grouped by charged offenses. That is, diversion significantly reduced days incarcerated for those charged with a Class D felony (86%) and Class A misdemeanor (79%), but did not significant decreased days incarcerated for those charged with Class B and C misdemeanors.

Shafer, Arthur, and Franczak (2004) conducted a quasi-experimental study of the diversion of mentally ill offenders with co-occurring substance use diagnoses. The results showed minimal differences in access or use of treatment services between the diverted versus non-diverted comparison group. Similarly, both groups showed improvement in mental health outcomes and substance use and both also had reductions in "indicators for criminality and violence" (p. 780), suggesting diversion did not improve outcomes more than typical criminal justice processing.

Case et al. (2009) analyzed the outcomes of jail diversion programs using a pre-post study design to determine how individual characteristics affect outcomes. The most common diagnosis of the offenders was bipolar disorder (26.2%), followed by depression (24.7%), and schizophrenia (24%). In general, it was found that after being enrolled in a diversion program offenders with mental illness experienced fewer new arrests and decreased jail time. The researchers found the individuals with more new arrests and more new jail time differed only in the number of prior arrests and jail days. The authors suggested their research highlights the importance of treatment that targets changeable risk factors that are known to predict future criminal behavior, similar to non-mentally ill criminal offenders.

One study that looked at the rediversion rates (when an individual who was previously diverted is rearrested and diverted again), of offenders with mental illness found approximately 20% of individuals who were previously diverted were rediverted and about half of the rediversions took place within 90 days of the initial diversion (Boccaccini et al., 2005). The researchers also found a small number (6%) of individuals were rediverted two or more times and that these individuals accounted for a disproportionate use of services.

In a study of the quality of life and psychological well-being of diverted offenders with mental illness, with follow-up at six months (Chung, Cumella, Wensley, & Easthope, 1998) and 12 months (Chung, Cumella, Wensley, & et al., 1999), the researchers compared the diverted group with a population sample. Quality of Life was rated based on scores on the Life Experience Checklist and General Health Questionnaire. Overall, at both 6 and 12 months, the researchers found the diverted group rated their quality of life significantly lower than individuals in the general population. This study had major limitations, given the significant differences between the two groups; nevertheless, within the diverted group the following trends were noted: they were "transient," had occupational problems, and had no improvement in psychiatric symptomology (Chung et al., 1999, p. 37).

Lange et al. (2011) conducted a review of post-booking diversion programs. The authors grouped the studies by type of diversion program (jail diversion, court diversion, Mental Health Court, etc.). Of note, this was not a meta-analytic evaluation of the studies; rather, the studies were "rated" by the authors on five outcomes (reduced recidivism, fewer days incarcerated, improved mental health status, increased service utilization, reduced substance abuse, and

increased quality of life). This method of determining effectiveness is a non-traditional method of evaluating studies, thus, the results should be interpreted cautiously. The rating system included the following scale: lack of evidence (there was a lack of studies evaluating this and studies available failed to find differences between treatment and comparison groups); limited effectiveness (at least one study provided supportive evidence); moderate effectiveness (two or three studies provided supporting evidence); and high degree of effectiveness (four or more studies provided supporting evidence). Based on this method of rating, jail diversion was scored as having, 'evidence of high degree of effectiveness' in reducing recidivism, but only 'evidence for moderate effectiveness' in reducing the number of days incarcerated, increased service utilization, reduced substance abuse, increased quality of life, and 'evidence for limited effectiveness' in improving mental health status. Court diversion (not including mental health court) was rated as having, 'evidence for moderate effectiveness' in reducing recidivism, in reducing the number of days incarcerated, reducing substance use, increasing quality of life, 'evidence for limited effectiveness' in increasing service utilization, and a 'lack of evidence' in improving mental health status. It is noted these findings are not commensurate with the findings of the review discussed below. However, on closer inspection, it appears the authors were referring to reduced arrest rates within-subjects after enrollment into a diversion program, that is, when comparing pre-and-post arrest rates. While, these results appear to be promising, they may be deceptive as similar trends have been noted in non-diverted offenders with mental illness (Shafer et al., 2004).

A study by Naples, Morris, and Steadman (2007) sought to understand the factors related to a decision to divert or deny admission to a diversion program. The researchers found when compared to the national arrestee population, divertees were disproportionately female, white, and older. Not surprisingly, they found being charged with a violent offense or felony level offense increased the likelihood of being denied entry into a diversion program. Similarly, after comparing the outcomes of two diversion programs Swaminath, Mendonca, Vidal, and Chapman (2002) concluded, postbooking diversion of offenders with mental illness with minor offenses is "eminently feasible" (p. 456). Lattimore et al. (2003) found, when compared to prebooking divertees, individuals diverted to postbooking tended to be lower functioning, including less education and employment, have lower levels of satisfaction with their lives, more serious drug

and alcohol involvement, have more prior involvement with mental health treatment (including emergency room visits and medication), and have more prior criminal justice involvement.

According to Arons (2000) a national survey in 1994 found five elements were associated with successful diversion programs (it is noted 'success' was undefined): all relevant mental health, substance abuse and criminal justice agencies were involved from the start, regular meetings between key personnel from various agencies were held, integration of services were encouraged through the efforts of a liaison person or boundary spanner between criminal justice and mental health staff, the programs had strong leadership, and non-traditional case management approaches were used. Non-traditional case management included staff that were hired less for educational background and more for their experience in criminal justice, mental health, and substance abuse systems.

Similarly, the following principles were suggested by Lamb, Weinberger, and Gross (1999, as cited in Theurer & Lovell, 2008): pre-release planning (including assessment and treatment planning), intensive post-release case management with a multidisciplinary team, structured programming, frequent contact and in-home visits, crisis response, authoritative treatment focusing on preventing recidivism, coordination with criminal justice staff, housing support and management, and, lastly, treatment for co-occurring substance abuse.

After a review of diversion programs (including pre and postbooking diversion), Aos, Miller, and Drake (2006) concluded diversion does not appear to significantly reduce recidivism; however, the researchers suggest, "This null finding does not mean the programs are not valuable; since they are typically designed to divert offenders from costly sentences in local jails" (p. 4). In general, the research appears to suggest postbooking diversion increases the amount of time an offenders with mental illness will spend in the community and, inversely, lessens days in jail when comparing both within-subjects and between subjects (Broner et al., 2004; Case et al., 2009; Hoff et al., 1999; Steadman & Naples, 2005). However, when looking at the relationship between postbooking diversion and other outcome measures, such as recidivism or rearrest, linkage to treatment services, mental health status or symptoms, and substance use, finding show no relationship or even a negative relationship. Thus, little can be concluded regarding long-term outcomes (Hartford et al., 2007) and, overall, there is insufficient evidence to suggest postbooking diversion as 'best practice' in working with offenders with mental illness (Scott et

al., n.d.). Nevertheless, some researchers have posited the current research provides tentative positive evidence for postbooking diversion, particularly when engagement strategies are used prior to release (Loveland & Boyle, 2007), programs are highly structured and court-involved (Broner et al., 2005), and when referring to quality, evidenced based, treatment services (Lange et al., 2011).

## Juvenile Pre-Adjudication Diversion Programs

Literature and programs on juvenile diversion programs can blur distinctions between diversion, treatment interventions, and programs. That is, diversion programs used at the point of probation intake are often also used for youth post-adjudication or for reentry from residential or secure facilities. Therefore, the programs reviewed in this section may also be applicable to the *Community Treatment for Juvenile Offenders with Mental Illness* and *Juvenile Reentry Programs* sections below.

Skowyra and Cocozza (2007) recommend diverting youth into community based services at the earliest point of contact possible. The authors reviewed pre-adjudication programs being used with mentally ill youth who come into contact with juvenile justice. One such program was The Special Needs Diversionary Program in Texas. Youth in this program are referred to home and school based treatment program by probation intake. Cuellar, McReynolds, and Wasserman (2006) conducted an evaluation of this program, comparing the treatment group to a matched waitlist group. The groups included both pre and post-adjudication youth and involved specialized probation supervision and mental health treatment group and 29% of the waitlist group had no prior offenses and another 20% and 29%, respectively, had only one prior offense, meaning the group was largely composed of low-risk youth. The researchers found in a one-year period the treatment group had significantly less new arrests compared to the waitlist group, 46% versus 69%, respectively.

Another pre-adjudication diversion program in Texas was evaluated by Colwell, Villarreal, and Espinosa (2012). This pre-adjudication diversion intervention included supervision by specialized probation officers who were trained in "motivational interviewing, family engagement, crisis intervention, and ongoing training and coaching on behavioral health

management" (p. 49). Youth in this intervention group were compared to a matched, nonrandomized comparison group. Youth in the diversion program were significantly less likely to be adjudicated for the referring offense and experienced other positive change, such as improved Global Assessment of Functioning (GAF) scores, had more referrals to community resources, improved school attendance, and fewer discipline referrals. It is noted, however, enrollment in the program was voluntary and likely included youth who were more motivated for treatment and change than those in the matched group who opted out of the program.

Sullivan et al. (2007) reviewed the Mental Health Juvenile Justice (MH/JJ) Diversion Project in New York. The program is described as a "12-county diversion program for delinquent youth who have an identified mental health and/or substance abuse need, and who are believed to be able to benefit from community based treatment" (Sullivan et al., 2007, p. 560). Youth were typically identified by intake probation and subsequently enrolled in case management and family treatment, Functional Family Therapy (FFT) or Multisystemic Therapy (MST), mental health and substance use treatment, as well as other services to meet the individual needs of the youth and family. Sullivan et al. (2007) reported the program decreased in the number of youth who were placed in residential or secure placements. Mental health and recidivism outcomes for the program were evaluated by Lyons, Griffin, Quintenz, Jenuwine, and Shasha (2003). Pre-post test results revealed significant reduction in problems with symptoms, risk behavior, and functioning. Recidivism for youth in the program was compared to juvenile arrest rates in the state of Illinois and reported to be 45% versus 72%, respectively. It is noted, however, it is difficult to attribute this decreased recidivism to participation in the program, as the two groups were not matched on demographic or historical data. Hamilton, Sullivan, Veysey, and Grillo (2007) compared the MM/JJ program in the difference cites where it was being implemented and found the program cites that provided direct services, rather than referring out for treatment, significantly reduced placement in residential or secure placements. No differences between programs were found to influence recidivism.

In Ohio, The Integrated Co-occurring Treatment Program (ICT) was formed to treat juveniles involved in the juvenile justice system who have a mental illness and a co-occurring substance abuse problems (Skowyra & Cocozza, 2007). The program is an intensive home-based intervention that can be used as a diversion at the point of intake probation or for reentry from

residential or secure placement. The website for the program reported statistically significant reductions in community placement and recidivism for those in the treatment program compared to youth involved in the juvenile court who received treatment as usual (TAU; Center for Innovative Practice, n.d.). It is noted, however, the members in the experimental and TAU groups were not randomly assigned or matched based on demographic or historical information.

Two programs in Florida, Juvenile Assessment Centers (JAC) and the Post-Arrest Diversion (PAD) program were reviewed by Cocozza et al. (2005). The JACs are a centralized processing center for arrested youth and include standard legal processing as well as mental health and substance abuse screening. The PAD is a program within the JAC that conducts an evaluation of first-time, nonviolent offenders, and creates safety and treatment plans. It is the goal of the JAC to prevent further penetration into the juvenile justice system; however, it appears the program was not geared toward or limited to mentally ill youth. The program was evaluated by Dembo et al. (2008) who found juveniles who completed the PAD program were significantly less likely to recidivate than non-completers.

Skowyra and Cocozza (2007) reviewed multiple other pre-adjudication diversion programs and the following is a brief review of those programs. Family Intervention Specialists (FIS) is a program in Georgia, where diverted youth are enrolled in Brief Strategic Family Therapy (BSFT). The Indiana Family Project in Indiana, is a program where youth are diverted into mental health programs that provide Functional Family Therapy (FFT). The Alabama Juvenile Court Liaison Initiative is a program in which liaisons connect youth with serious emotional disturbances to community mental health programs at multiple points of contact in the juvenile justice system. The Comprehensive Multisystemic Therapy Initiative was established as a program in New York where juveniles can be referred Multisystemic Therapy (MST) at multiple points of contact in the juvenile justice system. The National Mental Health Association (2004) reviewed the Texas First Time Offender Program (FTO). Youth who have no previous offenses are referred to FTO for mental health screening and assessment, as well as psychiatric care, substance abuse counseling, case management, and referrals to community/social services resources. No outcome evaluations of these programs could be found; however, the efficacy of BSFT, FFT, and MST will be reviewed below.

It appears many of the juvenile pre-adjudication diversion programs consist of diversion at the point of intake probation, with enrollment in treatment or case management and supervision services in lieu of adjudication. The pre-adjudication diversion programs which have been evaluated have shown promising effects, such as improved mental health and reduced recidivism. However, many of the evaluated programs included a large number low-risk youth. Other programs have incorporated treatment such as BFST, FFT, and MST, which have demonstrated positive effects in treatment juvenile offenders with mental illness will be reviewed in the *Juvenile Brand Name Treatment Programs and Interventions* section below.

## **Mental Health Court**

Mental health Courts (MHC) were created as a response to stop the cycling of persons with serious mental illness through the criminal justice system and also to prevent further penetration into the system (Almquist & Dodd, 2009; Cosden, Ellens, Schnell, & Yamini-Diouf, 2005; Cross, 2011; Steadman, Redlich, Callahan, Robbins, & Vesselinov, 2011). Following a review of MHCs, Almquist and Dodd (2009) concluded, "Mental health courts generally share the following goals: to improve public safety by reducing criminal recidivism; to improve the quality of life of people with mental illnesses and increase their participation in effective treatment; and to reduce court- and corrections-related costs through administrative efficiencies and often by providing an alternative to incarceration" (page v). Nevertheless, despite proliferation of MHCs throughout the nation, empirical research on the effectiveness of these programs is slim (Almquist & Dodd, 2009; Cross, 2011).

Cross (2011) conducted a meta-analysis of MHC studies. The analysis included 20 experimental or quasi-experimental studies of MHC programs in the U.S. published prior to 2011. It was found that offenders with serious mental illness and co-occurring substance disorders were "significantly less likely to graduate" from a MHC program than offenders without co-occurring disorders (p. 53). MHC was found to have a small-to-moderate effect on recidivism (0.32 p<.05). There was, however, great variability between the studies and the researcher found the studies rated as higher quality reported smaller effect sizes than lower quality studies, meaning, the studies with the highest quality research standards found MHC were not as effective as lower quality studies. Only 5 of the 20 studies reported adequate information to calculate effect sizes for mental health outcomes. Results of analyses of these five studies revealed mental health

outcomes were slightly worse for those who participated in MHC programs; however, these results did not reach a level of statistical significance. The author noted many of the publications did not detail the nature of the interventions (e.g., case management, mental health services, etc.) beyond the court interventions, thus the effects of the differing interventions on mental health outcomes are unknown.

In a seemingly novel approach to working with offenders with serious mental illness, California began enrolling individuals in dual-diagnosis courts. One such program, the Co-Occurring Disorders Court (CODC), was evaluated by Kleinpeter et al. (2006). The researchers explained the need for this specialized court was realized as offenders with serious mental illness and co-occurring substance abuse diagnoses were often found to be ineligible for enrollment in drug court and had poor outcomes. The CODC was developed using the traditional drug court model and followed Substance Abuse and Mental Health Services Administration [SAMHSA] guidelines. Individuals enrolled in the CODC had diagnoses of schizophrenia, bipolar disorder, or major depressive disorder, along with a substance abuse diagnosis. At an 18 month follow-up, 75% of the participants (n=72) had been retained in the program, approximately 24% graduated. The researchers measured quality of life, level of functioning, substance abuse, and behaviors and symptoms and found significant positive change overtime in each of the areas, with the most significant increase in the first six months.

Research on MHCs have demonstrated promising outcomes; however, heterogeneity between MHC programs and between the treatment interventions provided, as well as variability in study findings, suggests more high-quality research is needed to catch up with the vast proliferation of such programs. Further research is needed to determine how the services offenders with mental illness are referred to affect outcomes. Additionally, research is needed to determine who benefits from MHC, as the studies reviewed suggested offenders with serious mental illness and co-morbid substance abuse disorders do not benefit from such programs and return to traditional court process after failing to comply.

## Juvenile Mental Health Court

Significantly less empirical research exists on the outcomes of juvenile mental health courts (JMHC). Similar to adult MHC, evaluating the effectiveness of JMHC is difficult due to

heterogeneity between JMHC programs (Cocozza, 2006; Office of Juvenile Justice and Delinquent Prevention, 2006).

Behnken, Arredondo, and Packman (2009) conducted an outcome evaluation of a JMHC in California. The study was a pre-post design and lacked a comparison or control group. A total of 133 participants were included in the study; however, recidivism data was calculated using only 64 of the participants, due to a lack of access to files and information. The most common diagnosis was Attention Deficit/Hyperactivity Disorder (ADHD); however, the researchers noted many of the youth had comorbid disorders. The juvenile participants showed a significant decrease in recidivism when compared to their own history of offending. Nevertheless, it is important to note, without a comparison or control group it is unknown how this intervention would compare to traditional court processing or other interventions.

Similar to JMHC, in Washington State, the King County Treatment Court was implemented to meet the needs of juvenile offenders with mental illness (Skowyra & Cocozza, 2007). The court serves participants with serious mental disorders and substance abuse disorders who are moderate or high-risk offenders, with the exception of violent offenders or sex offenders. Youth in the program are enrolled in Multisystemic Treatment program (MST), case management, and an optional mentor program. The State of Massachusetts has formed Juvenile Court Clinics, where youth are referred for evaluation after presenting mental health concerns at the time of their juvenile court processing (Skowyra & Cocozza, 2007). The court evaluator then provides the youth and family with referrals for services. No outcome evaluations of either of these programs could be located.

# **Community Based Treatment**

In their review of programs that improve outcomes for offenders with mental illness in the community, Prins and Draper (2009) concluded some treatment programs and interventions have been found to be effective in reducing recidivism of non-mentally ill offenders; however, research into the efficacy of such practices and programs in reducing recidivism of offenders with mental illness has not advanced in the same fashion. Programs and interventions that have demonstrated efficacy in reducing recidivism in offenders who do not have mental illness generally included the following elements: the utilization of the risk-need-responsivity model,

focus on dynamic criminogenic needs, use of cognitive behavioral programs, and drug treatment programs.

Prins and Draper (2009) also reported some programs and interventions have evidence demonstrating the improvement of mental health outcomes with individuals with serious mental illness; however, as with recidivism studies, these programs and interventions have not been empirically researched as thoroughly with criminal justice populations. These programs and interventions include: Assertive Community Treatment, illness self-management and recovery, integrated mental health and substance treatment, supported employment, psychopharmacology, and family psychoeducation. The authors emphasized relationships "that are characterized by caring, fairness, trust, and an authoritative style" between probation or parole officers and offenders with mental illness have been shown to reduce recidivism (Prins & Draper, 2009, p. vii). Lastly, the following strategies and techniques were identified by the researchers as increasing service utilization by offenders with mental illness: problem-solving strategies and positive pressure with a focus on compliance, and boundary-spanning focusing on coordination between criminal justice systems and treatment providers.

Assertive Community Treatment (ACT) is a model that has been used for several decades for treating individuals with mental illness in the community. ACT programs generally consist of treatment teams that are made up of staff from different disciplines, such as a psychiatrist/psychiatric nurse, social workers, and counselors (Jennings, 2009; Morrissey, Meyer, & Cuddeback, 2007). The teams provide assistance with psychotropic medications, mental health/additions counseling, crisis intervention, and support with living/social skills, housing, and finances. ACT was originally designed to be as intensive and lengthy as needed to meet the needs of (non-offending) individuals with serious mental illness and assist in community tenure and avoid frequent rehospitalizations. ACT has been cited as a best practice in working with individuals with serious mental illness. However, after a significant proliferation of both national and international ACT programs, fidelity to the original model suffered and led to decreased effectiveness of the programs (Morrissey et al., 2007).

The population served by ACT often contained criminal offenders. Therefore, questions were risen regarding the transferability of the positive outcomes of ACT to criminal justice populations. One study demonstrated positive criminal justice outcomes for offenders with

mental illness involved in ACT (D. Wilson, Tien, & Eaves, 1995). Nevertheless, a study by Calsyn, Yonker, Lemming, Morse, and Klinkenberg (2005) highlighted that the criminal needs of these individuals may not be adequately met by traditional ACT. The study analyzed the criminal justice outcomes of a larger subject group. Participants in this study had co-occurring mental health and substance abuse diagnoses; the most common diagnosis was schizophrenia (51%). The subjects were randomized into three groups, including treatment as usual (TAU), Integrated Treatment (IT; a program originally created for dually diagnosed individuals), and an ACT group. The researchers found no difference between the three groups in criminal justice outcomes, including arrest, incarcerations, and summons, and concluded, "Future researchers and clinicians need to add interventions that specifically target reduction of criminal behavior in dual-diagnosed clients" (Calsyn et al., 2005, p. 245).

Some ACT-based programs focused on the individuals with serious mental illness and a cooccurring substance use diagnosis. These programs evolved into 'integrated dual diagnosis treatment teams' (IDDT; Morrissey et al., 2007). Other ACT programs began to incorporate elements aimed at preventing criminal recidivism, there programs developed into Forensic Assertive Community Treatment programs (FACT). Morrissey et al. (2007) highlighted that FACT programs are heterogeneous. They differ substantially in the point of contact and were used in jail diversion, MHC, and parole and reentry. The programs also differed by funding sources, which influenced staffing (with criminal justice funded programs staffed primarily by law enforcement personnel). Due to the high cost of implementing true ACT programs, many programs abandoned the interdisciplinary teams and, instead, utilized forensic intensive case management (FICM).

The following is a summary of recent research on these community based services. An attempt was made to distinguish between differing programs, such as ACT, FICM, and IDDT; however, this process was made difficult and the sections overlap, as many of the programs are not pure models and often blend the services from differing treatment models.

## Assertive Community Treatment

Assertive Community Treatment (ACT) was a revolutionary treatment approach for individuals with serious mental illness. ACT was deemed best practice for working with individuals with

mental illness by multiple governing authorities, including the Schizophrenia Patient Outcomes Research Team, National-Evidenced Based Practices Project (Morrissey et al., 2007), American Psychological Association, and the Task Force on Serious Mental Illnesses and Severe Emotional Disturbance (Bond, Drake, Mueser, & Latimer, 2001). After a review 25 randomized controlled studies, Bond et al. (2001) concluded, "ACT substantially reduces psychiatric hospital use, increases housing stability and moderately improves symptoms and subjective quality of life" (p. 149). It is also important to note that while ACT programs with high fidelity are expensive, a study by Latimer (1999) demonstrated ACT programs can be cost effective as a result of the savings due to reduced hospitalizations (Jennings, 2009). It is noted, however, ACT is not without criticism. Researchers have asserted the programs are "intrusive, coercive, and paternalistic" (Jennings, 2009, p. 14).

Coldwell and Bender (2007) conducted a meta-analysis looking at the effectiveness of ACT programs in working with homeless individuals with serious mental illness. From 52 studies, the researchers identified 10 studies that met their criteria for inclusion, six of which were randomized controlled trials (RCT) and four were pre-post research designs. The RCT demonstrated ACT programs significantly reduce homelessness (by 37%), as did the pre-post studies (104%), and symptom severity (26% and 62%, respectively). Reductions in hospitalizations were generally observed in the studies; however, the effect sizes were not significant. The researchers pointed out, their meta-analysis is not consistent with past studies of ACT that demonstrated significant reductions in hospitalization and suggested this is due to methodological differences in the individual studies.

One study looked at the effects of combining Mental Health Treatment Court (MHTC) with ACT (Cosden et al., 2005). It is noted, however, the ACT component was modified and may have resembled a more traditional case management approach, rather than treatment team style. Participants were randomized into MHTC within ACT group or a treatment as usual group (TAU). A significant difference in new convictions was not found between the groups and both groups demonstrated a reduction over time. Similar results were also found when comparing psychosocial functioning, including independent function, quality of life, decreased psychological distress and drug and alcohol abuse, with the MHTC group showing only slightly better improvements and both groups improving over time.

## Forensic Assertive Community Treatment

Due to the relative newness of Forensic Community Treatment (FACT) programs, there is limited research available. Though FACT and ACT have many commonalities, a study comparing clientele of FACT and ACT found many differences in those considered eligible for the different programs (Cuddeback & Morrissey, 2011). FACT eligible individuals were more likely to be African-American, male, and have experienced homelessness. They were also more likely to be diagnosed with schizophrenia, psychotic disorder-not otherwise specified, antisocial personality disorder, and a co-occurring substance abuse disorder. Not surprisingly, the FACT eligible group was also significantly more likely to have a criminal offense in all categories, such as against persons, drug, minor, property, sexual and violent offenses. The differences between the two populations suggests evidence is needed to demonstrate efficacy for not only the differing elements of FACT, but also to demonstrate efficacy with the distinct populations served by the programs.

Lamberti, Deem, Weisman, and Laduke (2011) conducted a survey of FACT programs to understand the role of probation officers in the programs. Surveys from 27 programs showed just over half (n=15) of the programs reported collaborating with probation officers, with nine reporting having a full time probation officer on staff. The participating probation officers reported spending an average of 29 hours per week with the FACT program. FACT staff and probation officers reported some barriers to collaboration, including 'differences in philosophy and approach,' with staff focusing on health with a 'diplomatic' approach and probation officers focusing on public safety with a more directive approach.

Erickson et al. (2009) looked at predictors of rearrest of individuals who were enrolled in a FACT program. Most of the individuals enrolled had a diagnosis of schizophrenia (77%), followed by bipolar disorder (12%), psychosis not otherwise specified (9%), and schizoaffective disorder (2%). Most also used drugs or alcohol during treatment (67%). Not surprisingly, the results revealed the largest predictor of rearrest was history of arrests for violent crimes, eviction from a residential placement, and the presence of antisocial personality traits. Erickson et al. (2009) concluded FACT programs should include interventions that are known to target modifiable risk factors which help prevent recidivism, such as cognitive-behavioral interventions

for anti-social behaviors, and include components that increase compliance, treatment adherence, and community tenure.

McCoy, Roberts, Hanrahan, Clay, and Luchins (2004) conducted a pre-post design study of a FACT program in an agency that was previously found to have positive mental health outcomes for individuals enrolled in the agency's ACT program. The FACT program, referred to as Collaborative Jail Linkage Project (CJLP), consisted of multidisciplinary teams, had a small ratio of staff to participants (1:6), and were available 24 hours a day. The teams made frequent contact with participants and collaborated with the local police department and parole officers. Pre-post data revealed the average number of days hospitalized and the number of arrests were reduced by approximately 90%. Though the number of participants was small (n=24) and the study lacked a comparison group, the authors purported this study demonstrated preliminary data that suggests programs such as this can serve to meet the needs of offenders with serious mental illness.

Though not always formally classified as a FACT program, Project Link is a program that began in New York in 1995, modeled after ACT, and served criminal justice populations (Lamberti et al., 2001). Project Link consists of mobile teams that are available 24 hours a day and made up of a forensic psychiatrist, nurse practitioner, and case advocates. The mobile teams have access to a 'dual diagnosis' treatment residence, which is modeled after modified therapeutic community programs. Referrals are received from jails, prisons, hospitals, emergency rooms, and police departments. The study consisted of 41 one-year 'completers' and analysis was performed comparing pre-post data. Results revealed a significant reduction in jail days in the year before entry into the program and year after (107.7 verse 46.4, respectively) and in the number of days hospitalized (115.9 verse 7.4, respectively). Also, the number of arrests were significantly lower and scores on a community functioning scale were significantly increased. The authors noted, "From a public safety perspective, no assaults, suicide attempts or other reportable incidents were observed" (Lamberti et al., 2001, p. 72).

Following legislative mandate in California, the Mentally III Offender Crime Reduction Grant (MIOCRG-II) allowed for proliferation of local FACT programs. Outcomes from one such program were reported by Cusack, Morrissey, Cuddeback, Prins, and Williams (2010), who noted this program had high fidelity with ACT model. Participants were randomized into a FACT or TAU group. The finding revealed the FACT group had significantly more outpatient

visits and fewer days hospitalized at both 0-12 and 13-24 months follow up. There were no differences observed in crisis contacts between groups. The FACT group experienced significantly fewer jail bookings at 0-12 months and, though this trend continued into the second year, the differences were not significant. Importantly, however, due to budgetary cuts by the California State Legislature, the program was "reduced midway through the fourth year of its planned, 5-year lifespan" and resulted in missing data for the second year (Cusack et al., 2010, p. 358). Cost analysis revealed the FACT group had significantly less per person inpatient costs than the TAU group at 0-12 months (\$5,426 verse \$8,852, respectively), with a similar, but not significant, pattern at 13-24 months (\$4,266 verse \$7,156, respectively). Jail costs were also lower, but not significant, at both time periods. Though per person outpatient costs were significantly higher at 0-12 months (\$13,474 verse \$5,115, respectively) and 13-24 months (\$8,570 verse \$4,722) the authors concluded, "FACT led to fewer bookings and a greater likelihood of staying out of jail in each year even though FACT did not result in shorter jail time if enrollees were booking into jail. In addition, FACT participants had fewer days of hospitalization compared to TAU participants. The increase in outpatient cost was partially offset by a decrease in inpatient service costs and jail costs" (Cusack et al., 2010, p. 362).

Lamberti, Weisman, and Faden (2004) conducted a survey of 16 FACT programs in nine states (the two programs discussed above were included in this review: Cusack et al., 2010; McCoy et al., 2004). Most of the programs (81%) received referrals from jails, other referral sources included probation, parole, courts, and law enforcement. Most of the programs utilized probation officers as a member of the treatment team (69%) and also had advisory or oversight boards (75%), which consisted of representatives from mental health and criminal justice agencies, half had a residential treatment component, and half were funded by the MIOCRG program. The three programs reported outcomes, two of which are described in the studies above and will not be reviewed again here. The third set of outcome data came from the Arkansas Partnership Program. Cimino and Jennings (as cited in Lamberti et al., 2004) reported that of the first 18 participants treated, 17 "remained arrest free and without substance abuse while living in the community an average of 508 days" (p. 1289).

Traditional ACT programs with high fidelity have demonstrated efficacy in reducing hospitalization, and were found to be moderately effective in reducing mental health symptoms;

however, outcomes studies have not demonstrated efficacy in reducing substance abuse, recidivism, or time in jail. Forensic ACT programs have developed to meet the unique needs of the criminal justice populations. At present, too few outcome studies on FACT programs have been published to draw conclusions on the effectiveness of the programs. While some programs have found promising outcomes, others report mixed or negative results (Epperson et al., 2011; Jennings, 2009; Morrissey et al., 2007). Researchers attribute these discrepancies to the heterogeneity of FACT programs (Epperson et al., 2011; Jennings, 2009) and, therefore, question the generalizability of the findings (Epperson et al., 2011). Nevertheless, Cuddeback, Morrissey, and Cusack (2008) determined, based on population size, rates of severe mental illness, and criminal justice statistics, large urban communities should have enough FACT teams to serve approximately 44% of the population with serious mental illness, equivalent to .05% of their adult population.

## Community Based Treatment for Juvenile Offenders with Mental Illness

As stated above, many of the programs reviewed in the *Juvenile Pre-Adjudication Diversion Program* section are also applicable here and should be reviewed for a more comprehensive understanding of existing juvenile community based treatment programs.

Prime Time Project is a comprehensive program in Washington State that serves minority youth who are at a high-risk for reoffense and have mental illness and a co-occurring substance abuse diagnosis (University of Washington Department of Psychiatry and Behavioral Science, n.d.). The interventions are community based and include Multisystemic Therapy (MST), Dialectical Behavior Therapy (DBT), Relapse Prevention (RP), and Motivational Interviewing (MI). The programs website reported two evaluations of the program are currently underway.

In Indiana, the Dawn Project was created to help in producing a 'system of care,' "by espousing genuine family involvement, cultural competence, a focus on keeping services in the community, and blending of funding streams" (Anderson, Wright, Kooreman, Mohr, & Russell, 2003, p. 64). The program aims to maintain a comprehensive system of mental health and social services care using the principles of case management and wraparound services. Juvenile offenders with mental illness can be referred to the program through the juvenile court if they carry a DSM-IV diagnosis, are involved in at least one system in addition to the juvenile court (i.e., mental health,

child welfare or special education), and are at risk of removal or have previously been removed from their home. The youth were assessed using the Child and Adolescent Functional Assessment Scale (CAFAS). Pre and post test analysis revealed a significant reduction in impairment. It is noted, however, the program also enrolls youth who are not involved in the juvenile justice system, thus, those results were not limited to juvenile offenders. The evaluators also found youth who had previous involvement with the juvenile justice system were significantly more likely to fail to complete the program than those with no history of involvement. Furthermore, of the youth who failed to complete the program, 91% returned to the system. It would appear juvenile offenders with mental illness may not benefit from this program as much as non-offending youth; however, further research is needed in this area.

In Colorado, two programs that serve juvenile offenders with mental illness and co-occurring substance use problems, have been piloted. The Sterling Pilot Program is a community mental health center that provides mental health treatment, transition services, parent groups, as well as a substance abuse groups for parents with substance abuse problems. The Denver Pilot Program is similar; however, treatment includes MST. Pre-post tests for the Sterling Pilot Program revealed improvement in the following problem areas using the Colorado Client Assessment Record (CCAR): depression, aggressive/dangerousness, disrespect, legal programs, and overall problem severity. Changes were also observed in the areas of substance abuse, manic behavior, and attention problems; however, these changes did not reach a level of significance. The Denver Pilot Program observed significant reductions on the following scales on the CCAR: suicide, depression, aggression/dangerousness, legal problems, substance use, manic behavior, attention problems, family problems, and overall problem severity.

Most community programs for juveniles with mental illness involve the juvenile being referred to a community mental health provider. Nevertheless, outcomes of these programs are not readily available, as there are few community based programs that have been involved in empirical research studies. Additionally, there are problems with generalizing the effectiveness of one program to another, due to the heterogeneity of the community programs and demographics of the populations served. Nevertheless, some 'brand name' treatment programs have undergone more rigorous empirical research and are commonly used by community treatment programs nationally. These include interventions such as Multisystemic Therapy

(MST), Multidimentional Treatment Foster Care (MTFC), Functional Family Therapy (FFT), Wraparound, Brief Strategic Family Therapy (BSFT), and Aggression Replacement Training (ART). Current research on these 'brand name' treatment programs will be reviewed in *Juvenile Brand Name Treatment Programs and Interventions* section below.

## **Treatment within Correctional Facilities**

An article in Corrections Today stated that at a minimum, "To avoid litigation" correctional institutions must provide access to care, proper treatment, and qualified staff" (Maue, 2006, p. 46). Nevertheless, the author highlighted that treatment within correctional facilities is challenging given the lack of cross training in both criminal justice and mental health standards, the lack of collaboration between criminal justice and mental health staff, and the lack of policy to regulate and guide decision-making. The NIC (2004) surveyed Department of Corrections (DOC) institutions and found the scope of mental health treatment varies greatly by, and possibly within, institutions. Some institutions provide services to inmates with serious mental illness, while others do not distinguish by severity. Varied treatment modalities are used, including pharmacotherapy, individual therapy, group therapy, inpatient, and outpatient housing. Of these modalities, group treatment is used most often in correctional institutions due to cost effectiveness. The APA (2000, as cited in NIC, 2004) outlined the following guidelines for mental health treatment in prisons. First, the APA recommended treatment be varied in the approaches used and consistent with current accepted mental health practices. Additionally, it is recommended the following components be available: crisis intervention, acute care, chronic care, outpatient treatment services, consultation be available, and discharge/transfer planning be provided (NIC, 2004, p. 25).

In reviewing court cases involving mental health treatment of prisoners, Chaiken and Shull (2007) concluded the following "six elements that should be in place for mental health treatment in prisons: a systematic program for screening and evaluating inmates to identify those who require mental health treatment," "treatment must entail more [than] inmate segregation," "a sufficient number of trained mental health professionals to provide individualized treatment," "maintenance of accurate and complete mental health records," "supervision and periodic evaluation of prescription medications," and "the ability to indentify, treat, and supervise inmates with suicidal tendencies" (p. 18-2).

# Specialized Housing within Adult Corrections

Fagan and Ax (2003) reviewed the use of mental health treatment units within correctional institutions. The authors noted many correctional facilities have developed specialized units for offenders with mental illness; "however, often these programs or units are designed to be only temporary, usually for stabilization or transitioning purposes, rather than places where inmates reside instead of returning to the general population" (Fagan & Ax, 2003, p. 115). Additionally, there are often an insufficient number of beds to house all of the offenders with mental illness who are in need. Lovell, Allen, Johnson, and Jemelka (2001) and Haney (2003) pointed out that as a result of the lack of longer-term care units, inmates with serious mental illness who cannot safely remain in the general population often are placed in disciplinary settings, such as isolation or segregation, or in supermax confinement, which can cause further psychological distress for the mentally ill inmate.

Chaiken and Shull (2007) found inmates who are placed in segregation often have "decreased access to medical and psychological care" (p. 18-3). The authors cited the reason for this decrease in access is due to facility limitations, such as a lack of space and privacy to meet with mental health personnel, limited staff, and safety precautions that inhibit the therapeutic process. Additionally, inmates in segregation have reduced access to other activities that are beneficial to holistic rehabilitation, including "social, educational, recreational, [and] vocational" programs (Chaiken & Shull, 2007, p. 18-7). The authors described multiple levels of care that would improve the treatment of inmates with mental illness who are in segregated units. First, the authors suggested 'walk-in' and crisis intervention services should be available to the inmates. Next, case management services can assist in facilitating care and 'outpatient' mental health treatment can assist inmates in dealing with adjustment and mood disorders. For those with more severe mental illness and functional impairment, day treatment services may be necessary to provide intensive interventions. The authors suggested 'inpatient' acute care should be provided to inmates who are a danger to themselves or others, which can be provided outside of correctional facilities. Lastly, the authors suggested the use of interdisciplinary teams and behavioral incentive programs can be beneficial.

Lovell et al. (2001) evaluated a residential treatment facility in a Washington State prison. The facility was staffed by correctional and mental health staff. Interventions included medication

and case management, as well as counseling services, such as psycheducational classes, cognitive behavioral interventions, anger management, stress management, symptom reduction, and relapse prevention. The authors noted that due to this additional treatment, the cost of the unit was as much as two times higher than other units in the facility. Most of the offenders in the study carried schizophrenia spectrum diagnoses (49%), followed by bipolar disorder (17%), and major depression (17%). Pre-post findings revealed a significant reduction in the severity of mental health symptoms, less frequent disciplinary related actions, and improved self-management. No comparison or control group was used. Nevertheless, the authors pointed out, the findings replicated previous study findings in which such units were found to reduce the number of infractions and amount of time in segregation (Condelli, Dvoskin, & Holanchock, 1999, as cited in Lovell et al., 2001).

A similar program for inmates with mental illness in a Florida jail was evaluated by Hagar, Ludwig, and McGovern (2008). The program consisted of a specialized housing unit for the offenders with serious mental illness. Most of the inmates housed in the specialized mental health unit were diagnosed with psychotic disorders (73%), followed by bipolar disorders (14%), and depressive disorders (5%). The researchers found the number of 'negative incidents' the inmates with mental illness were involved in did not decrease on the mental health unit compared to incidents while in general population, as was hypothesized. However, the researchers found a small portion of the inmates had far more negative incidents and were transitioned to 'closed units,' while a portion had much fewer incidents and were successfully transitioned to lower security mental health units. Significant improvement in the severity of symptoms for all inmates in the study were found using pre-post test data; however, no significant changes were found in the number of symptoms. The researchers concluded the specialized unit appeared to be beneficial for a portion of the inmates and further evaluation would be beneficial to identify the factors affecting each group.

While empirical research on how offenders with mental illness should be housed in correction institutions is tenuous, most who write on the subject agree prison environments can cause decompensation in mental health status, including worsening of symptoms, and aggressive and violent outbursts for offenders with serious mental illness (Adams & Ferrandino, 2008). Other researchers have highlighted that in addition to being anti-therapeutic, inmates with mental

illness are at an increased likelihood to be victimized by other inmates (Blitz, Wolff, & Shi, 2008; Carr et al., 2006). Additionally, if offenders with serious mental illness cannot be managed in the general population, placement in segregation or isolation can be dangerous for the serious mentally ill and has been found to increase their risk of suicide (Adams & Ferrandino, 2008; Coid et al., 2003). Instead, researchers have suggested inmates with serious mental illness should be placed in therapeutic environments, where they can live in low-stress milieus and have more structured socialization (Adams & Ferrandino, 2008; Caverley, 2006).

## Offenders with Mental Illness and Co-occurring Substance Disorders within Adult Corrections

As reviewed above, researchers have found having serious mental illness and co-occurring substance abuse disorders to be a major risk factor for future violent behavior (Elbogen & Johnson, 2009; Mullen, 2002); therefore, treatment focus on these individuals should be a high priority. In a review of treatment programs for offenders with mental illness and co-occurring substance abuse diagnoses within correctional institutions, the National Institute of Corrections (NIC; 2004) found three modalities to be commonly implemented: parallel, sequential, and integrated treatment. Parallel treatment includes enrollment in two separate programs or therapists. Sequential treatment includes receiving treatment in one area prior to being referred to another program. The NIC suggested parallel and sequential treatment is inadequate in treating offenders with serious mental illnesses. The National Advisory Council of the U.S. Substance Abuse and Mental Health Services (SAMHSA; as cited in NIC, 2004) recommended treatment for offenders with mental illness and co-occurring substance use disorders include integrated treatment. Integrated treatment includes one therapist or a team a treatment providers, where the team works together to meet treatment goals. Within this model, treatment should incorporate both the mental health and substance abuse treatment needs of the individual, with both being viewed as primary treatment targets. This approach is considered to be beneficial as greater consistency can be achieved. Additionally, researchers have noted many substance abuse programs exclude individuals with a co-occurring mental illness or an individual who is taking psychotropic medication. Therefore, the Center for Substance Abuse Treatment (CSAT; 1994, as cited in NIC, 2004) recommended inmates with co-occurring mental illness and substance use problems be treated in specialized groups or treatment programs.

Hills (2000, as cited in NIC, 2004) outlined the following recommendations as being important in the treatment of co-occurring disorders in DOC therapeutic programs: services be integrated, both mental health and substance abuse be treated as a priority, treatment be individualized to address needs and skill deficits, pharmacotherapy be used when needed, phases of treatment be individualized to the setting, treatment should be extended to community upon release, and support and self-help groups be used in reentry (p. 37).

Traditionally, therapeutic communities (TC) have been used to treat inmates with drug and alcohol use problems, where inmates enrolled in the TC are placed on specialized units and are segregated from the general population (NIC, 2004). Based on this model for treatment, Modified Therapeutic Community (MTC) was developed as a framework to treat offenders with mental illness and co-occurring substance abuse diagnoses (Sullivan et al., 2007). MTCs typically contain psychoeducation, cognitive behavioral treatment, conflict resolution groups, dual recovery groups, and medication management. Few empirical studies of MTCs could be found, likely due to the relative newness of the programs. Nevertheless, in a review of MTCs that included four studies, Sacks, McKendrick, Sacks, and Cleland (2010) compared the outcomes of MTC to treatment as usual (TAU). It is noted, the studies included community treatment programs and were not limited to correctional settings. Nevertheless, the results of the meta-analysis found MTC had a significant positive impact on mental health, substance abuse, and criminal behavior.

Additionally, reentry MTCs (RMTC) have been created to transition inmates with mental illness and co-occurring substance abuse into the community (Sacks, Chaple, Sacks, McKendrick, & Cleland, 2012). In a randomized control study, Sacks et al. (2012) evaluated the effectiveness of this program versus TAU (including parole and case management services). The finding revealed participants in the RMTC had significantly less recidivism. Additionally, the researchers discovered the offenders who participated in the MTC while incarcerated benefited the most from the program, suggesting continuity in treatment programming was beneficial while transitioning.

Due to the risk for violent behavior in offenders with mental illness and co-occurring substance abuse diagnoses, identifying and treating these individuals should be a high priority within the criminal justice system. Within correction facilities, many researchers recommend the use of

integrated treatment models to meet both the mental health and substance abuse needs in a consistent and comprehensive manner. MTCs are an example of a treatment model that can provide integrated treatment, in addition to aligning with recommendations that mentally ill offenders be housed in therapeutic environments while incarcerated. Outcomes of MTC appear to be promising; however, further research is necessary prior to recommending MTC as best practice.

#### Treatment within Juvenile Justice Facilities

This section will review treatment programs within juvenile justice facilities, such as detention, secure care, and residential placements.

In New Mexico a juvenile detention center created a standard intake screening process that identifies and assists in finding the proper placement for youth with mental health needs (Skowyra & Cocozza, 2007). Youth who are identified as having mental health needs are diverted into the Children's Community Mental Health Clinic (CCMHC). Placement decisions are also made as a result of the screening and assessment process. Youth may remain in a secure detention setting or be diverted into residential treatment programs, to probation supervision, or released into their home without probation. Additionally, these youth can begin receiving mental health services and referrals to treatment providers. Since the inception of the screening process, the program reported a 37% reduction in youth housed in the detention facility, as well as a reduction in the length of stay from 33 to 12 days over a two-year period.

A similar program has evolved in the state of New York (Skowyra & Cocozza, 2007), where specialized mental health units have been created in juvenile justice facilities. Mobile mental health teams consisting of clinicians from local mental health agencies go into the facilities and provide mental health treatment, in addition to consulting with and providing training for the juvenile justice staff members. Youth remain in the mental health units until they have completed their mental health treatment and are discharged with a community transition plan. Skowyra and Cocozza (2007) reported an outcome evaluation was conducted at one of the program cites; however, the results of the evaluation could not be located.

To fill gaps in the system of treating juvenile offenders with mental illness in Massachusetts an intervention called Youth Services America (YSA) was created (McMackin & Fulwiler, 2001).

This program included psychiatric nurses and psychiatrists going to juvenile facilities to provide assessment, medication management, with a smaller portion of their time spent on case and family consultation, and finally therapy. The authors noted that through the piloting of the program, the developers realized a need for the youth to have a consistent treatment provider when transferring between facilities, to provide continuity in care. Data was collected and analyzed by the program developers. They found most of the youth referred to the program had a mood disorder, including depressive disorders and bipolar disorder, and a large portion also suffered from ADHD. The developers looked at continuity in treatment provided and found youth with an initial assessment within a detention facilities. The program developers are unsure the cause of this difference, as they expected care in residential facilities to be more stable due to the longer durations in stay at residential facilities; however, they hypothesized those assessed in detention may have more acute psychiatric needs. No mental health or recidivism outcome data was reported.

Hagan, Cho, Jensen, and King (1997) evaluated the Intensive Treatment Unit (ITU) program, located within a secure juvenile justice facility. This program provided intensive treatment to high-risk juvenile offenders who had been sentenced to a minimum of six months. Recidivism results were reported and compared to a group of youth in the general population units of the secure facilities. The results revealed reduced risk for future criminal behavior for both groups. Nonetheless, without a matched control group, it is difficult to interpret the meaning of these findings. The researchers concluded, "This study indicates that, at least for adolescents who have received intensive treatment programming, mental disturbance does not significantly increase the risk for future offending" (p. 348). This conclusion does not, however, take into account the possible benefits the intervention group received from the intervention.

In Washington State, the Integrated Treatment Model (ITM) was created as a system of care and affects treatment at multiple points of contact (Washington State Juvenile Rehavilitation Administration, 2002). Within residential and secure placements, treatment is provided to youth and incorporates elements of Cognitive Behavioral Treatment of Borderline Personality Disorder, Aggression Replacement Training (ART), and Moral Reconation Training (Washington State Juvenile Rehabilitation Administration, 2002, p. 5). Additionally, once

transitioning out of secure or residential settings, parole services are provided using Functional Family Therapy and Functional Family Parole. Lucenko and Mancuso (2009) reported improved employment rates and a 10% decline in recidivism for youth served by the ITA program in two different cohorts of youth. However, the researchers cautioned the results should be interpreted with caution as the groups were not matched and no control group was utilized.

The Texas Youth Commission (TYC) created a standard for the screening and treatment of offenders with mental illness who come into contact with juvenile justice secure facilities (Wheeler-Cox, 2000). The juvenile offenders are initially screened when entering the system and those with serious mental illness who cannot function within the traditional setting are referred for residential treatment in the Emotionally Disturbed Treatment Program (EDTP). Youth remain in the program for nine months and receive behavioral interventions and psychiatric management. Regarding the EDTP program, Skowyra and Cocozza (2007) reported, "Recidivism rates for youth in intensive specialized treatment programs were compared to rates for youth who demonstrated a high need for treatment, but were unable to receive services. The notable difference in recidivism rates between youth who received specialized treatment and those with the high need who did not receive it, indicates that intensive specialized treatment programs for youth with specialized needs" (p. 94).

The Office of Juvenile Justice and Delinquency Prevention (OJJDP; n.d.-a) highlight concerns of placing youth in secure facilities. The OJJDP webpage states, "Research on juvenile corrections has generally found that confinement can negatively affect youth in custody and can lead to further involvement in the juvenile and adult criminal justice systems rather than interrupting the offending cycle or facilitating rehabilitation." OJJDP endorses the use of diversion of juvenile offenders into community treatment programs where possible.

Researchers agree there is currently limited research on treatment of juvenile offenders with mental illness in correctional settings, making it difficult to endorse programs as evidenced based (Desai, Lam, & Rosenheck, 2000; Underwood, Barretti, Storms, & Safonte-Strumolo, 2004). Nevertheless, these researchers emphasize the importance of treating both mental health and criminogenic needs while a youth is placed in a juvenile justice facility, using treatment interventions that are research based and have been accepted as best practice, such as cognitive

behavioral strategies and motivational interviewing. Additionally, collaboration between the juvenile justice system and mental health systems is stressed as an essential piece of treatment. The American Academy of Child and Adolescent Psychiatry (2005) have put forward recommendations (Table 2) for treatment of juvenile offenders within juvenile justice facilities.

Table	2
	2 ary of AACAP Recommendation for Treatment of Offenders in Juvenile Justice Facilities
1.	The clinician should have awareness and understanding of the operations of the juvenile correctional facility and the issues affecting it, including the interface with multiple systems (e.g., police, probation, family/juvenile courts, social services, child welfare agencies) and the existing educational and health care systems within the facility (p. 1088).
2.	All youth entering a juvenile justice detention or correctional facility should be screened for mental or substance use disorders, suicide risk factors and behaviors, and other emotional or behavioral problems (p. 1088).
3.	All youth held in a juvenile justice detention or correctional facility should receive continued monitoring for mental or substance use disorders, emotional or behavioral problems, especially for suicide risk (p. 1090).
4.	Any youth with recent/current suicidal ideation, attempts, or symptoms of a mental or substance related disorder during the period of incarceration should be referred for additional evaluation by a mental health clinician (p. 1090).
5.	Clinicians working in juvenile justice settings must be vigilant about personal safety and security issues and aware of the actions that may compromise their safety and/or the safety and containment of the incarcerated youths (p. 1091).
6.	All qualified mental health professionals should clearly define and maintain their clinician role with youthful offenders and their family members (p. 1091).
7.	Adequate time and resources are needed to perform a mental health assessment of incarcerated youths using a biopsychosocial approach with special attention to cultural, family, gender, and other relevant youth issues (p. 1092).
8.	Clinicians should be alert to symptoms, behaviors, and other clinical presentations of malingering, secondary gain, and manipulative behaviors by incarcerated juveniles (p. 1093).
9.	All clinically referred youths should be evaluated for current and future risk of violent behavior (p. 1093).
10.	Mental health professionals should be aware of unique therapeutic and boundary issues that arise in the context of the juvenile correctional setting (p. 1093).
11.	Clinicians should be knowledgeable about the facilities policies and procedures regarding seclusion, physical restraints, and psychotropic medication and in support of humane care should advocate for the selective use of restrictive procedures only when needed to maintain safety or when less restrictive measures have failed (p. 1094).
12.	Clinicians should use psychotropic medications with incarcerated juveniles in a safe and clinically appropriate manner and only as part of a comprehensive treatment plan (p. 1094).
13.	Clinicians should be involved in the development, implementation, and reassessment of the youth's individualized treatment plan while in the correctional setting and with the planning process for reentry to the community that best incorporates multidisciplinary, culturally competent, family-based treatment approaches (p. 1095).
14.	It is paramount that clinicians working in juvenile justice settings are aware of relevant financial, fiscal, reimbursement, agency, and role issues that may affect their ability to provide optimal care to incarcerated youths and consultation to the juvenile correctional system (p. 1096).

Note: Adapted from American Academy of Child and Adolescent Psychiatry (2005)

# **Probation and Parole Responses**

Offenders with serious mental illness on probation and parole experience more impairment than their non-mentally ill counterparts. They often have difficulty maintaining employment and housing and are more likely to experience homelessness (Baillargeon et al., 2010; Wolff et al., 2010). Additionally, offenders with serious mental illness are twice as likely to have their community supervision revoked as a result of violations (Prins & Draper, 2009). A number of programs, such as those described below, have been developed to meet the unique needs of this population on probation and parole.

It is noted specialized probation, reentry, and case management programs are heterogeneous, yet overlap significantly. Where possible, the studies in the following sections were separated based on their focus on probation services versus case management and transition or parole services.

# Adult Specialized Probation Services

The use of specialized probation units (SPU) has increased across the nation to meet the unique challenges of probationers with mental illness. Though SPUs are heterogeneous, they generally have the following elements in common: caseloads are specialized and include only offenders with serious mental illness, they have reduced caseloads, they have continuing training on management of offenders with serious mental illness, there is an integration of criminal justice and treatment services, and problem solving strategies to increase compliance are emphasized (Epperson et al., 2011; Prins & Draper, 2009; Skeem, Emke-Francis, & Louden, 2006; Wolff et al., 2010). However, despite the existence of SPUs for nearly two decades in many agencies, few studies have examined their outcomes and cost-effectiveness (Wolff et al., 2010).

In a descriptive review, Wolff et al. (2010) describe one SPU, which was funded following successful pilot studies in New Jersey. The SPU consisted of 30 mental health probation officers (MHPO) who carried caseloads of between 25 and 30 offenders with serious mental illness (compared with a typical caseload of over 130 probationers). The MHPO received initial and ongoing training on topics related to mental health and the management of offenders with serious mental illness. The MHPO were expected to foster a relationship and work collaboratively with the community treatment providers. To be eligible for the program the offenders had to have an

Axis I diagnosis and be considered at risk to the community or for parole revocation. The outcomes evaluation of this program could not be located for this review.

A study conducted by Louden, Skeem, Camp, Vidal, and Peterson (2010) analyzed the interactions between MHPO and offenders with serious mental illness, with specific interest in the content of the meeting, strategies employed, and process used by the MHPO. The content of the meetings contained a high portion of discussions regarding mental health, in particular satisfaction with treatment. Criminogenic needs were assessed as being the 'big four,' such as antisocial attitudes, antisocial personality orientation, antisocial associations, or 'minor four,' such as finances, employment/school, family/marital, and substance abuse. Big four needs were addressed infrequently; however, minor criminogenic needs were discussed more often. With regard to strategies employed by MHPOs, neutral pressure was found to be used most often (e.g., assessing compliance), followed by positive pressure (e.g., offering incentives), and lastly negative pressure (e.g., increasing supervision, threats). The most common process observed included affirmations and information gathering. The MHPOs also frequently gave directives. Support, advise giving, reflection, and confrontation were used the least. Louden et al. (2010) concluded SPUs can be more effective if there is a focus on criminogenic needs, particularly the big four, increased use of client involved problem solving, and also increased use of empathy, warmth, and active listening with directives.

Louden, Skeem, Camp, and Christensen (2008) surveyed SPU and traditional probation units. The researchers found both SPU and traditional probation departments lacked formal policies for working with offenders with serious mental illness, such as the frequency or type of contact, time in office and field work, and response to violations. However, the MHPO were found to meet more frequently, had reduced caseloads, collaborated with treatment providers as part of a treatment team, and used problem solving and positive pressure to increase compliance. Both SPU and traditional probation units reported using graduated sanctions; however, traditional probation units began with harsher sanctions. The authors concluded this discrepancy may be due to traditional probation units tending to focus on community safety, whereas SPUs focus on community safety and rehabilitation. These results were similar to those found in previous studies (Skeem, Encandela, & Louden, 2003).

No studies reporting mental health, service utilization, or criminal justice outcomes of SPUs were found in this review. Nevertheless, some researchers appear to generalize the effectiveness of parole programs to probationers, citing that the two groups have similar treatment mandates and monitoring techniques (Skeem & Louden, 2006). Thus, finding in the following section may be relevant to interested agencies.

## Adult Reentry Parole and Case Management

Upon release from incarceration, offenders with serious mental illness experience substantial difficulties. Not only do they experience higher rates of unemployment and homelessness, but they also experience significantly more emergency room visits and hospitalizations and most do not receive sufficient mental health treatment (Baillargeon et al., 2010). There is also some preliminary evidence to suggest offenders with serious mental illness with co-occurring substance abuse diagnoses may experience an even greater proportion of impairment (Baillargeon et al., 2010). Offenders with serious mental illness have been found to be at an increased risk of multiple incarcerations, particularly those diagnosed with bipolar disorder who were 3.3 times more likely to have four or more incarcerations (Baillargeon, Binswanger, Penn, Williams, & Murray, 2009). In a review of reentry programs, Baillargeon et al. (2010) suggested the reasons for the failure to meet the needs of offenders with serious mental illness after release include: lack of treatment programs in criminal justice facilities, a lack of discharge planning and support, lack of available mental health treatment facilities in the community, and of those limited community treatment programs, many are ineffective in treating offenders with serious mental illness or refuse to accept criminal justice involved individuals. The following is a summary recently published reentry/transition program articles.

Wolff, Gerardi, Shi, and Schumann (2009) conducted a study of incarcerated individuals to assess their readiness to reenter the community upon release. The survey included 4,200 adult inmates incarcerated in 11 correctional facilities. Individuals who reported having no social support, including friends or family, accounted for 16.8% of males and 17.9% of females. Over half of the respondents indicated they had a drug conviction. The authors noted individuals with drug charges are often excluded from social service programs, such as financial aid and housing services. Many indicated they have a medical condition that will require treatment in the community (40.8% males, 60.1% females) and reported taking medication for health problems

(21.5% males, 40.6% females). Mental health problems were reported by 5.6% of males and 19.8% of females and many indicated they would require community treatment for mental health problems (17.2% males, 37.6% females) and substance abuse (25.5% males, 49.5% females). Roughly 25% of males and 20% of females rated their readiness to reenter as poor or fair and indicated they would be unable or were uncertain of their ability to support themselves independently. It is noted these surveys were not limited to offenders with serious mental illness. Nevertheless, based on findings that have demonstrated offenders with serious mental illness have higher levels of impairment, it is likely they experience a disproportionate amount of barriers or may be more severely impacted by these factors.

The Mentally Ill Offender Community Transition Program (MIOCPT) is a five-year pilot post release, intensive case management program that was established by the Washington State Legislature (Arnold-Williams et al., 2008). The program was initiated as a result of delays in releasing offenders with serious mental illness from correctional facilities, "due to their ability to access reasonable treatment and living accommodations prior to the maximum expiration of their sentences" (Arnold-Williams et al., 2008, p. 22). The study included 115 inmates who were released from correctional facilities between 1998 and 2008. The majority of the study participants (48%) had a diagnosis of a psychotic disorder, followed by depression (24.5%), and bipolar disorder (23.6%). However, 90.9% had a co-occurring substance abuse diagnoses and 56.4% had a diagnosis of a comorbid personality disorder. The treatment services were subcontracted to local mental health facilities and were heterogeneous and tailored to meet the needs of the individuals. Treatment modalities included individual treatment, group treatment, day treatment, treatment planning, evaluations, and education management. The researchers found individuals in their treatment group received post-release services at a rate of 97.2%, compared to 45% in a comparison group and had hospitalization rates of 17.4% versus 23%, respectively.

Arnold-Williams et al. (2008) also compared recidivism rates of 92 participants to a matched comparison group and found the treatment group had significantly fewer new felony convictions. However, while the treatment group also experienced few new offenses (felony and misdemeanor), this difference did not meet statistical significance. Survival analysis revealed the first year appeared to have the greatest effects, with a reoffense rate of less than half than that of

the control group, nevertheless, reoffenses increased at a higher rate in the second year. Lastly, the study group participated in interviews to help discover symptoms and behavioral correlates of being convicted of a new felony conviction. The researchers found suicide attempts, psychotic symptoms, and drug and alcohol use were associated with an individual obtaining a new felony conviction at a level of statistical significance. Arnold-Williams et al. (2008) concluded, "The evidence supports the efficacy of intensive mental health case management services in reducing the likelihood of subsequent violent felony recidivism" (p. 19).

Theurer and Lovell (2008) also published a study on MIOCTP. Their study included 64 participants who entered the program between 1998 and 2003. Outcome data revealed MIOCTP participants recidivated significantly less than the comparison group on new felony offenses, 23% versus 42%, respectively, and in any new offense, 39% versus 61%, respectively. The researchers also found a significant relationship between felony recidivism and drug dependency and use of non-prescription drugs.

Also during this time period, the Dangerous Mentally Ill Offender program (DMIO) began (Phipps & Gagliardi, 2002). Through the DMIO program, dangerous offenders with serious mental illness in correctional facilities were identified, assessed, and if appropriate, were assigned to the county of expected release. To be eligible, the offenders had to be diagnosed with a major mental disorder and be considered 'dangerous,' as determined by risk of recidivism, past violent offenses, history of drug or alcohol abuse or dependency, and be prescribed involuntary medications. Three to five months prior to an individual's release, representatives from Department of Corrections (DOC), Department of Social and Health Services (DSHS), Regional Support Network (RSN), and mental health agencies met to develop a transition plan. Most often, the inmate was included in these meetings to assist the planning team in assessing his or her needs and begin to engage him or her in the treatment process. The inmates were released to community treatment, state hospital, or other secure institutions. Community treatment was contracted to local mental health agencies, is noted however, that many treatment agencies refused to participate in the treatment of DMIOs due to increases in their insurance rates or notifications that their insurance agencies would no longer provide coverage if they treated this clientele. At a four-year follow-up, DMIOs were found to be convicted of a new felony or new

violent felony significantly less than a matched comparison group, 28% versus 48% and 16% versus 25%, respectively.

Connections is an intensive case management program (modeled after Assertive Community Treatment) which was developed in the State of California (Burke & Keaton, 2004). Offenders with mental illness were eligible to participate in the program if they were in jail, under midlevel or intensive probation supervision, had a DSM-IV Axis I diagnosis, and a Global Assessment of Functioning (GAF) score of 50 or lower. Once inmates were determined to be eligible (n=448), they were randomly assigned to the Connections treatment intervention or treatment as usual (TAU) group. The most common diagnosis was schizophrenia (43% in the Connections group and 46% in the TAU group), followed by depression (32% and 31%, respectively), and bi-polar (23% and 22%, respectively). The Connections program consisted of three-person teams, made up of social workers, deputy probation officers, and correctional deputy officers. The teams also collaborated with two psychiatrists and an employment specialists. Treatment began with pre-release coordination and intensive post-release casemanagement, which lasted approximately 9 to 12 months, and included frequent contact, transportation, drug and alcohol testing, assistance with employment and housing, and linkage to mental health and substance abuse treatment. Offenders in the TAU group had access to mental health treatment while in jail and, if eligible, to county case management. It is important to note budgetary constraints caused the program to end earlier than anticipated, which resulted in 129 participants being excluded in follow-up analysis. Despite this, outcome data revealed participants in the Connections group (n=225) were significantly less likely to be booked into jail on a new offense during the program than the TAU group (n=224; 35% versus 46%, respectively) and spent fewer days incarcerated (20.2 versus 34.6, respectively). However, there was only a small, but not significant, difference in new convictions between the groups. Similarly, at a six-month follow up a small, but not significant, difference was found between the groups of new jail bookings. The authors compared the 'successful' completers (n=131) of the Connections program to the TAU group and found significant differences in the number of new bookings and convictions; however, there are methodological problems with limiting the outcomes to this subset of the original Connections group.

Kesten et al. (2011) conducted a study of the Connecticut Offender Reenty Program (CORP), which served offenders with serious mental illness who were transitioning from prison to the community. CORP was developed to meet the unique needs of this population and included three components, Life Skills Reentry Curriculum, reentry planning, and implementation of the reentry plan utilizing criminal justice supervision and community services. The CORP group consisted of 88 offenders with serious mental illness and were compared to 83 individuals in a TAU comparison group. It is noted, however, the two groups differed on demographics, diagnoses, and convictions types. The results revealed at six months the CORP group had lower recidivism rates than the TAU group, 14.4% versus 28.8%, respectively. The researchers also found younger age was significantly associated with rearrest. Unexpectedly, the authors noted, having a co-occurring substance abuse diagnosis was not significantly associated with rearrest, though it was associated with reincarceration.

In Texas, a jail 'inreach' program was initiated to provide continuity in services and assist in accessing treatment services for offenders with mental illness who were also homeless (Buck et al., 2011). The creation of the program enabled case managers to make contact with the target population in the jails and created a system of record sharing. Staff met with the inmates while they were incarcerated, preformed evaluation, and assisted in formulating discharge plans; which included linkage to treatment services, assistance with housing, and transportation. Of those referred to the program (n=492) 56% were successfully linked to services. Pre-post data revealed a 36% decrease in arrest rates in the year following enrollment in the program.

The Parole Outpatient Clinic (POC) in California has been in use and is designed to meet the mental health needs of parolees with mental illness (Farabee, Bennett, Garcia, Warda, & Yang, 2006). However, it was found that many of the parolees who were eligible for services at the POC were not being identified and referred. The Mental Health Services Continuum Program (MHSCP) was created to address this gap in linkage services and was designed to provide timely and cost-effective services, with a goal of reducing recidivism and increasing public safety. The program included the following elements: a pre-release assessment and eligibility determination, enhanced post-release mental health treatment and improved continuity in care, and assistance with other reentry services. Incarcerated offenders with mental illness were assigned to one of two treatment levels, Correctional Case Management System (CCCMS; for higher functioning

offenders with mental illness) or Enhanced Outpatient Program (EOP; for lower functioning offenders with mental illness). Outcomes revealed 54.5% of eligible inmates received an assessment, with significantly more EOPs receiving assessments than CCCMS (59.3% versus 53.7%, respectively). Inmates who were assessed prior to release were significantly more likely to report to POCs than those not assessed (63.8% versus 42.8%, respectively). Recidivism data revealed attending more POC sessions was associated with decreases in recidivism. For example, of offenders with nine or more contacts, 36.2% were reincarcerated within 12 months, compared to 65.8% of individuals who had no POC contact. A cost-benefit analysis of this program revealed having one or more POC contacts resulted in an annual savings of \$4,890 for EOP and \$2,876 for CCCMS parolees.

Ventura, Cassel, Jacoby, and Huang (1998) analyzed the effects of case management services when delivered in jail and post-release. The study included 261 offenders with mental illness who were followed for three years after their release from jail. Their analysis revealed 78% of the offenders with serious mental illness received case management services while incarcerated. After release, only 29% of the offenders received case management services in the community. The researchers noted a decline in the provided services each year, with 27% receiving services the first year, 15% receiving services the second year, and 10% receiving services the third year. The offenders who received case management services were more likely to be younger, legally classified as severely mentally disabled, have psychotic symptoms, be diagnosed with schizophrenia, have previous hospitalizations, and had been found not competent to stand trial. Receiving case management services, but was not found to have an effect on recidivism. Nevertheless, those who received community case management services had significantly less rearrests for violent or general offenses. It is noted, however, due to the limitations of the study design, a causal relationship cannot be inferred.

Researchers who have reviewed the literature on probation and parole services have concluded that though current research studies have revealed mixed results (Loveland & Boyle, 2007), there appears to be promising evidence to suggest these programs can reduce reincarceration of offenders with serious mental illness and increase treatment service utilization (Prins & Draper, 2009; Skeem & Louden, 2006). However, it is important to note some researchers have pointed

out, there are trends which suggest that due to the close monitoring of offenders with serious mental illness by probation and parole officers, this population may receive more technical violations and, therefore, experience increased time in jail (Prins & Draper, 2009). To mitigate this problem, Lurigio, Rollins, and Fallon (2004) have suggested using violations as an opportunity for intervention, the use of graduated sanctions, and reincarceration only as a last resort.

Overall, evidence appears to suggest short-term risk of recidivism can be positively affected by SPUs; however, evidence of reducing long-term risk is mixed (Skeem & Louden, 2006). Some programs have demonstrated a cost benefit compared to TAU (Farabee et al., 2006; Phipps & Gagliardi, 2002). Lastly, evidence suggests programs can improve their effectiveness if offenders with serious mental illness are assessed and receive transition planning services prior to release (Baillargeon et al., 2010; Lurigio et al., 2004) and are linked to treatment providers that are knowledgeable and adept in working with criminal justice populations (Prins & Draper, 2009).

# Juvenile Reentry Programs

The Family Integrated Transitions (FIT) program is a reentry program that has been implemented in Washington State (Aos, 2004). The program was designed to be used with juvenile offenders with mental illness and co-occurring substance dependency diagnoses. The program begins in the two months prior to discharge from the juvenile justice facility, continues for four to six months in the community, and is designed using elements taken from Multisystemic Treatment (MST), Motivational Enhancement Therapy (MET), Relapse Prevention (RP), and Dialectical Behavior Therapy (DBT) and includes intensive community and family based treatment. The researcher compared the recidivism of 104 FIT participants to a group of 169 matched comparison youth. Youth in the FIT program experienced a statistically significant drop in recidivism in the 12-month follow-up period in contrast to the comparison group, 27.0% versus 40.6%, respectively. The researcher also conducted a cost-benefit analysis of the program. The results revealed, though the program was costly to run, the reduction of recidivism achieved by the program ultimately resulted in cost savings.

In a second publication on the FIT program by Trupin, Kerns, Walker, DeRobertis, and Stewart (2011), youth were followed for a 36-month period. Again, the juvenile offenders in the FIT

program experienced a significant reduction in felony recidivism when compared to the comparison group. However, the researchers did not find differences in violent felony or misdemeanor recidivism. As a result of these findings, Trupin and colleagues expressed cautious optimism for the efficacy of the program, as well as a need for a randomized-control study.

Functional Family Parole (FFP) is a program developed based on the development and research of Functional Family Therapy (FFT; Rowland, 2008). Few studies could be found on the effectiveness of FFP; however, due to the intervention's base in FFT, interested agencies should review the FFT section below. FFP employ the probation or parole officer as the treatment provider and utilizes engagement and motivational strategies to increase participation in the program, while providing skill based and family interventions. Rowland (2008) conducted an analysis of FFP with 621 youth who received FFP intervention and were compared to a comparison group, with the same number of participants, who received traditional probation or parole services. The results revealed no statistical difference in recidivism rates of the two groups. However, the researcher notes, adherence to the FFP program greatly affected the outcomes. That is, youth who received the FFP with strict adherence to the program were less likely to recidivate than youth who received low-adherence FFP. In conclusion, Rowland suggested FFP is a promising probation or parole intervention, if followed with high-adherence to the program.

Trupin, Turner, Stewart, and Wood (2004) conducted a retrospective study of a juvenile reentry program in Washington State, looking at the effects of transition planning and receipt of community mental health services on recidivism. The researchers found juvenile offenders who received mental health services upon reentry and those with more extensive post-release discharge planning were significantly less likely to reoffend when compared to those who received less extensive post-release services or only received pre-release discharge planning (contacts and planning while still incarcerated).

Skowyra and Cocozza (2007) reviewed additional reentry programs, including Project Hope and the Center for Alternative Sentencing and Employment Services (CASES). Project Hope is a program developed in Rhode Island where juveniles reentering the community are eligible if they have a serious emotional disturbance, which the authors noted can include conduct disorder. Project Hope is a team intervention and includes "the youth, their parent(s), the clinical social

worker, probation officer, and community officer" (Skowyra & Cocozza, 2007, p. 92). The services provided are dependent on the needs of the youth and family. No outcome evaluations for the Project Hope program could be located.

CASES is a program developed in New York and assists mentally ill youth with reentry into the community, with a focus on reintegration into schools. CASES developed a committee to identify and eliminate barriers to reentry and the Community Prep High School, which is tailored to meet the needs of youth who are not yet able to enroll in public schools due to social or academic needs. Skowyra and Cocozza (2007) reported preliminary data has shown CASES increased the rates of school attendance for youth reentering the community.

Lastly, the Bridge program was reviewed by the National Mental Health Association (2004). The Bridge program was developed in South Carolina and provides "individualized yet comprehensive family-centered" interventions for one year upon reentry (Association National Mental Health, 2004, p. 14). The services provided can include, "alcohol/drug counseling, family-based counseling, health care, tutoring and other educational services, mentoring, recreational therapy, and assistance with building job skills" (Association National Mental Health, 2004, p. 14). No outcome evaluations of the Bridge program could be located.

As seen above, studies of juvenile reentry programs have demonstrated promising outcomes, though further research is necessary. The California Corrections Standards Authority (CSA; 2011) asserted maintaining continuity in care is imperative when planning reentry programs for juvenile offenders with mental illness. CSA also recommended the use of multidisciplinary teams, inclusion of families, and targeting of additional needs, such as education and job skills.

### **Brand Name Treatment Programs and Interventions**

## Adult Brand Name Treatment Programs and Interventions

Duncan et al. (2006) conducted a review on structured group interventions with offenders with serious mental illness. The researchers found the majority of the studies looked at cognitive behavioral treatment and included themes such as problem-solving, anger/aggression management, and self-harm. Duncan et al. (2006) reported that due to methodological limitations of the studies, meta-analysis was not possible and that the conclusions should be seen as

preliminary. Nevertheless, they found a moderate to high effect for structured group interventions included in the problem solving and anger/aggression management categories. Lipsey, Landenberger, and Wilson (2007) also found offenders who were treated in a cognitive behavioral program significantly less likely to reoffend than control groups in a one-year follow-up period.

Similarly, Rotter and Carr (2011) posited cognitive behavioral treatment that focuses on criminogenic needs and have shown positive effects in working with offenders without mental illness, will also be useful in the treatment of offenders with serious mental illness. Particularly because the highly structured and focused interventions may suit the learning styles and abilities of the seriously mentally ill (Rosenfelf et al. 2007, as cited in Rotter & Carr, 2011). The authors highlighted Thinking for a Change (T4C), Moral Reconation Therapy (MRT), Lifestyle Change, Options, and Reasoning and Rehabilitation (R&R), as each program "demonstrating statistically significant reductions in criminal recidivism in non-mentally ill populations" (Rotter & Carr, 2011, p. 725).

Clarke, Cullen, Walwyn, and Fahy (2010) conducted a pilot study of a Reasoning and Rehabilitation (R&R) treatment program for offenders with serious mental illness. The researchers highlighted that R&R, a cognitive-skills intervention, has been found to significantly reduce recidivism in criminal justice populations; however, it has not been established in treating the seriously mentally ill populations. R&R was originally developed based on the premise that "(1) some offenders are under-socialized and lack the values, attitudes, reasoning and social skills required for pro-social adjustment, and (2) such skills can be taught (Clarke et al., 2010p. 490). Individuals were recruited and treated at a medium secure hospital and were considered appropriate if they had a diagnosis of schizophrenia, schizoaffective disorder, or bipolar disorder, and had a history of violent offending. Participants in one unit received the intervention (n=15) and participants on a second unit received TAU (n=17), thus subjects were not randomized into the two groups. Outcomes measured included social problem solving, coping skills, and criminal attitudes. Results revealed the R&R group improved significantly more than the TAU group in problem solving ability and coping responses. The R&R group also improved on criminal attitudes, though these differences were not significant. The authors assert these preliminary findings demonstrate tentative support for the use of cognitive skill based programs in treating

offenders with serious mental illness and encourage such studies in the future with larger sample sizes.

Rotter and Carr (2011) indicated both MRT and Lifestyle Change has been used to treat offenders with mental illness; however, no outcome evaluations of those programs could be located.

## Juvenile Brand Name Treatment Programs and Interventions

Multisystemic therapy (MST) is one of several treatment models designed to address the behavioral and delinquency concerns of youth by intervening with the family. MST is a community based alternative to more restrictive and often times costly interventions within the juvenile justice system (Ogden & Hagen, 2006; Schaeffer & Borduin, 2005). However, MST is a costly community based intervention at approximately \$5,000 per youth (Littell, Popa, & Forsythe, 2005). Within the MST model, criminogenic needs are targeted by the therapist and family with a typical length of four to six months. These targets include antisocial behavior, sources of conflict in the family, family relations, peer relations and school functioning (Littell et al., 2005; Ogden & Hagen, 2006).

The program is designed to treat high-risk youth with severe and chronic involvement within the juvenile justice system and are between the ages of 12 to 17. MST is utilized with youth with mental illness and looked to as an alternative to more restrictive settings and psychiatric hospitalizations. MST is implemented through treatment teams consisting of therapists and crisis caseworkers, who are supervised by psychologists and psychiatrists (Littell et al., 2005). MST uses an integrated approach consisting of a combination of approaches from strategic family therapy, structural family therapy, and cognitive behavioral therapy (Littell, 2004). Additionally, therapists are on-call to the family at all times for crisis intervention and parent coaching. Fidelity to the model is monitored through the use of quality assurance tools. Nevertheless, the implementation of the model in a community based setting is an independent endeavor and potential weakness as it may detract from the effectiveness of the model (Timmons-Mitchell, Bender, Kishna, & Mitchell, 2006).

In a 2005 systematic review, findings of eight randomized controlled trials indicated that evidence regarding the effectiveness of the model is inconclusive (Littell et al., 2005). However,

the review also stated that MST has several strengths that other family models do not, such as a relatively large number of research studies on the efficacy of the model and a comprehensive intervention framework. Alternatively, in a 2011 data report submitted by MST Services, the report stated MST outcomes show a 25-70% reduction in long-term rates of rearrest, 47-64% reduction in out-of-home placements, marked improvements in family functioning and a decrease in mental health problems (MST Services Inc., n.d.). MST is endorsed as a model program for juvenile offenders with mental illness by such agencies as Blueprints for Violence Prevention, Office of Justice, SAMHSA's National Registry of Evidence-Based Programs and Services, OJJDP Model Program Guide and Child Trends (Center for the Study and Prevention of Violence, n.d.-c).

Multidimensional Treatment Foster Care (MTFC) is another evidence-based practice that serves as an alternative to more restrictive and costly out of home settings for juvenile offenders with mental illness. MTFC is based on social learning theory, which stresses that an individual's behaviors, attitudes and emotions are influenced by their environment (D. Smith, 2004). In this case, MTFC is able to impact a juvenile offender through the day-to-day interactions with the MTFC parent in the foster care setting. The main targets of focus within the MTFC model are for close supervision, positive adult-youth relationships and decreased association with delinquent peers (D. Smith, 2004). In addition the model focuses on the reinforcement of normative and prosocial behaviors, consistent limits and follow-through on rule violations, the development of positive work and academic skills, the support of family members in increasing effective parenting skills, a decrease in conflict between family members and the education of youth related to forming positive relations with peers and adults (P. Fisher & Chamberlain, 2000).

Within the MTFC home, parents provide reinforcement and sanctions through a carefully followed daily behavior management system, which is a point and level system. The point and level system allows the MTFC parents to discipline the youth in a manner that does not escalate negative behaviors while still providing direct rewards and sanctions for positive and negative behavior (D. Smith, 2004). The MTFC parents are in daily contact with the MTFC program supervisor for training and guidance. Under the MTFC model, it is believed that multiple team members are needed in order to adequately provide the most individualized treatment and ensure that all have a voice in the treatment process (P. Fisher & Chamberlain, 2000). Therefore, the

MTFC treatment team consists of behavior support specialists, youth therapists, family therapists, consulting psychiatrists, and case managers or clinical team supervisors.

The average MTFC treatment length is seven months at approximately \$3,900 per month. While MTFC is time intensive and more costly than typical foster care settings, it is estimated that the long-term cost savings of utilizing MTFC saved \$21,836 to \$87,622 per youth (Chamberlain, Leve, & DeGarmo, 2007). Results from MTFC interventions have shown that both boys and girls referred from juvenile justice settings show an increase in benefits in MTFC than other forms of group care such as detention, residential treatment, and psychiatric settings. It is estimated that MTFC participants have approximately half the number of arrests as their counterparts in other forms of group care and have fewer running away incidents than their peers in group care settings (MTFC, n.d.). In addition, at follow-up it was found that MTFC youth had spent less time in locked settings, had fewer criminal referrals, and had fewer delinquent peers and associates (Lee & Thompson, 2008). It also suggested that males in MTFC is endorsed as a model program by Blueprints for Violence Prevention, SAMHSA, Office of Juvenile Justice Delinquency Prevention, Office of Justice, and Child Trend (Center for the Study and Prevention of Violence, n.d.-b).

Functional Family Therapy (FFT) is a short-term family intervention that typically consists of eight to twelve sessions and up to 30 hours of intervention time spread over a period of three months and can be delivered in the office or at the client's home (Sexton & Turner, 2010). The average cost of an FFT intervention is approximately \$3,750 per youth (Zagar, Busch, & Hughes, 2009). The FFT model follows a series of stages that are designed to focus on multiple levels of interaction such as the treatment system, family, and individual functioning (Sexton & Alexander, 2000). The model has three phases, which consist of engagement and motivation, behavior change and generalization. The engagement and motivation phase focuses on developing alliances, reducing resistance, improving communication, minimizing hopelessness, reducing dropping out of the program, develops a family focus and increases motivation for change. The behavior change phase includes developing and implementing individual change plans for family members, changing the presenting delinquency behaviors, and building relational skills including communication and parenting skills. Finally, the generalization phase

focuses on maintaining and generalizing the change in the family, preventing relapses and including appropriate community resources that will help support the change in the family.

FFT has shown to be effective in reducing the involvement of youth with other social services, preventing further escalation of the presenting problem, preventing younger children in the family from becoming involved in the system of care, preventing adolescents from entering the adult criminal system and has been shown to effectively generalize treatment outcomes across various treatment systems (Center for the Study and Prevention of Violence, n.d.-a). FFT is endorsed as a model program by Blueprints for Violence Prevention, Communities that Care, the Office of Juvenile Justice Delinquency Prevention, and the Office of Justice (Center for the Study and Prevention of Violence, n.d.-a).

Wraparound is a process of involving multiple community based service providers for youth with severe emotional and behavioral disorders that focuses on family interventions (Pullmann et al., 2006). Wraparound creates a unique and individualized plan for the youth and family through the use of services and community resources. This approach differs from other models that approach the youth with a fixed and predetermined set of targets (Suter & Bruns, 2009). Wraparound is guided by several principles: a team-oriented planning process that involves caregivers, children, agencies and community services, the priority of hearing the family's voice and choice, providing individualized services in all areas of the child and family's life, the use of natural supports, and the use of flexible approaches (Pullmann et al., 2006).

Wraparound Milwaukee, a Blueprints promising program model, reports a monthly cost for the wraparound model of approximately \$3,786 per month compared to much more costly interventions for youth placed in more restrictive settings such as inpatient care, residential programs and group homes (Wraparound Milwaukee, 2009). The Wraparound Milwaukee program demonstrates the effectiveness of the model through increased child functioning, the achievement of two-thirds of participants remaining in a permanent setting upon completion of the program, increased school enrollment, and overall family satisfaction with services received. Wraparound is rated as a promising program by Mental Health America, the Substance Abuse and Mental Health Services Administration and the Center for Mental Health Services (Office of Juvenile Justice and Delinquency Prevention, n.d.-d).

Brief Strategic Family Therapy (BSFT), is designed to give families the appropriate tools to extinguish the problem behaviors of adolescents and maladaptive family dynamics (Horigian, Robbins, & Szapocznik, 2004). BSFT meets these goals through the use of interventions targeting dysfunctional patterns of family interaction and through providing skill building strategies. BSFT's framework views the family as the center and stabilizing force in child development and the main environment in which children learn to think, feel and behave (Robbins & Szapocznik, 2000).

The BSFT model looks at three central aspects of treatment; the family system, the structure and patterns of interaction, and strategy. The family system is seen as a collection of parts that interact with each other. Those parts then interact with each other creating patterns, which then create the structure of the family. Strategic interventions targeting practical, problem-focused and deliberate actions are then added. These three constructs create the framework for BSFT (Szapocznik & Williams, 2000). The model is intended to be a short-term intervention, with 60 to 90 minute sessions that occur over an average of 12 to 15 sessions (Center for the Study and Prevention of Violence, 2006).

BSFT has shown to be effective in reducing drug abuse, improving family functioning, reducing behavior problems, reducing symptoms among conduct disordered youth and youth aggression (Szapocznik & Williams, 2000). BSFT is endorsed as a promising program by Blueprints for Violence Prevention, SAMSHA, Office of Juvenile Justice and Delinquency Prevention and Communities that Care (Center for the Study and Prevention of Violence, 2006).

Aggression Replacement Training (ART) is another program which has demonstrated efficacy in treating high-risk juvenile offenders. Originally developed by Arnold Goldstein, the ART model is based on three approaches: skillstreaming to target behaviors, anger control training to target emotions, and moral reasoning to target cognitive processes (Amendola & Oliver, 2010). Skill-building, positive and negative reinforcers, and guided group discussions with role-plays facilitate the acquisition and reinforcement of skills in the group lessons. An example of the components involved in an anger-reducing role-play include: recognizing triggers, corresponding cures, utilizing anger reducers, using reminders, thinking ahead about consequences, using a social skill and finally a self-evaluation of the skills used and their effectiveness (Glick & Gibbs,

2011). ART is a 10 week and 30 hour intervention that typically consists of a group of 8 to 12 youth. ART costs approximately \$800 per youth for the course of treatment (Barnoski, 2002).

ART has shown to reduce new felony offenses and reduce recidivism by 28%; however, there is no statistically significant evidence to show a reduction in violent felony recidivism (Barnoski, 2002). ART is rated as effective by the Office of Juvenile Justice and Delinquency Prevention (Office of Juvenile Justice and Delinquency Prevention, n.d.-c) and the U.S. Department of Education (Amendola & Oliver, 2010).

## **Cost Effectiveness**

Drake, Aos, and Miller (2009) and Aos et al. (2011), used meta-analytic techniques to determine cost-benefit ratios by different types of program for both adults and juveniles based on outcome studies previously conducted. The long-term savings, as a result of savings for both crime victims and tax payers, were estimated and compared with costs of treatment programs to obtain a cost-benefit value. While cost-benefits were reported for numerous intervention programs, program serving offenders with mental illness reported significant cost savings. For Washington's Dangerously Mentally Ill Offender program, program costs per individual were calculated at \$31,626 and cost savings for each individual served were estimated at \$71,969. For Washington's Mental Health Court, program costs per individual were calculated at \$2,878 with savings estimates of \$11,352 per individual served.

There were no juvenile treatment programs included in the cost-benefit study that served only juvenile offenders with mental illness included in the WSIPP studies. Nevertheless, Aos et al. (2011) found multiple juvenile programs were cost effective. These programs included Aggression Replacement Training (benefit minus cost: \$65,481), Function Family Therapy (\$57,341), Multidimensional Treatment Foster Care (\$33,047), Family Integrated Transitions (\$16,052), Drug Court (\$9,713), and Coordination of Services (\$4,884). Again, these studies were not limited to juveniles with mental illness, thus, these findings should be interpreted with caution.

Cowell, Broner, and Dupont (2004) found mixed results when analyzing the cost effectiveness of pre-booking diversion and post-booking diversion programs for offenders with serious mental illness with co-occurring substance abuse in multiple locations over the course of 12 months. As

a result of the disparate outcomes in each location, the researchers did not compare across cites. In most of the locations diversion resulted in statistically significant decreases in criminal justice costs when comparing diverted to non-diverted. Regarding mental health costs, one location experienced statistically significant increases when comparing the two groups, the other locations had decreases or increases in cost that were not statistically significant. One location experienced statistically significant decreases in overall costs (\$6,260), a second had statistically significant increases in overall costs (\$6,260), a second had statistically significant increases in overall costs due to the increased mental health costs (\$5,855), and the remaining two did have statistically significant differences. Thus, there were no findings that could be attributed to diversion; instead the differences are attributable to the individual programs. The researchers also looked at whether the programs demonstrated both effectiveness and statistically significant cost estimates. Only one location, Memphis, had significant results in both of these areas, where it was found that increases in effectiveness were associated with increases in cost.

In a similar study of a Mental Health Court (MHC) in Pennsylvania conducted by the RAND Corporation, it was found the first year after participation in a MHC, savings from diverting individuals away from incarceration were offset by increased mental health treatment costs (Ridgely, Engberg, & Greenberg, 2007). A subsample of MHC participants were tracked for a second year and showed significant decreases in jail costs during that year that more than offset the costs of treatment. MHC was associated with lower costs of over \$1000 per fiscal quarter and appeared to result in more cost savings when serving more seriously mentally ill offenders. While overall findings were statistically inconclusive, the researchers suggested, "over a longer time frame, the MHC program may actually result in net savings to government to the extent that MHC participation is associated with reductions in criminal recidivism and utilization of the most expensive sorts of mental health treatment (i.e. hospitalization)" (Ridgely et al., 2007, p. xixii).

In their review of cost effectiveness of programs that treat offenders with mental illness, Steadman and Naples (2005) pointed out that this is a very difficult task, as there are methodological limitations with existing literature, such as the lack of randomized samples. Nevertheless, they highlighted that the lack of increased cost of diversion programs demonstrates

this population can be diverted successfully. That is, they spend less time incarcerated without posing increased risk to the community.

# **Best Practice Recommendations**

The following best practice recommendations are derived from this review and synthesis of the literature on mentally ill offenders. These recommendations are applicable to the management and treatment of mentally ill offenders in both adult and juvenile justice systems.

- <u>Collaboration</u> between criminal justice and mental health agencies is necessary to meet the needs and goals of the respective systems and to provide comprehensive treatment of offenders with serious mental illnesses. This can include working together on interdisciplinary teams, developing agreed upon roles and responsibilities, and developing complementary goals.
- 2. <u>Continuity</u> between placements and points of contact in the criminal justice and mental health system is recommended. This may include wraparound services, specialized aftercare planning, information sharing agreements, or specialized case managers as "boundary spanners" who work to transition offenders between programs and the criminal justice and the mental health system.
- 3. <u>Diversion and community-based treatment should be utilized whenever possible with all</u> criminal offenders, but it may be especially important with mentally ill offender due to the particularly adverse effects of jail and prison on the severely mentally ill. Programs that use assertive community outreach, club-house models, and specially trained probation/parole officers and case managers are especially promising for use with mentally ill offenders.
- 4. Staff in both criminal justice and mental health organizations should be <u>cross-trained</u> on the relevant needs and goals of the respective systems. This should include training on criminogenic needs, responsivity factors, signs and symptoms of serious mental illness, and strategies for working with offenders who have serious mental illness.
- 5. <u>Screening and assessment</u> of criminal risk, mental health, and substance abuse issues should be completed at each point in contact in the criminal justice system. Information gained from these screening and assessment tools should be used to inform the level and type of treatment needed for each individual.
- 6. Treatment should include a <u>focus on criminogenic needs</u>, which can reduce the risk of future criminal behavior and further penetration into the criminal justice system.

- Mental health stabilization and treatment must be provided to mentally ill offenders throughout the criminal and juvenile justice system. This will facilitate the offenders' participation in treatment for criminogenic needs and overall rehabilitation.
- Treatment for offenders should be comprehensive, multi-systemic, and psychotherapeutic interventions should be <u>cognitive behavioral or cognitive social leaning</u> and include interventions such as modeling, reinforcement, role-playing, skill building, and cognitive restructuring.
- 9. <u>Psychiatric medication</u> should always be considered for mentally ill offenders in the criminal and juvenile justice system. This should include an initial psychiatric assessment, ongoing medication management, and <u>compliance enhancement strategies</u>. This includes proactive interventions to improve compliance, such as identifying barriers to adherence (post-release access, economics, offender resistance), and using practical aftercare planning, ongoing case management, and motivational strategies to overcome those barriers.
- 10. All programs serving mentally ill offenders should employ <u>tracking</u>, <u>evaluation</u>, and <u>program improvement strategies</u>. This should include a system-wide tracking system that identifies and tracks mentally ill offenders along with program-specific assessments of both mental health and criminal justice outcomes, ongoing process evaluations, and fidelity assessments.

## **Summary**

The treatment and rehabilitation of offenders with serious mental illness has been a concern of both the criminal justice and mental health systems. Despite this overwhelming concern, there has been a lack of rigorous research studies to demonstrate efficacy for specific treatment programs for this population. Nevertheless, some programs have demonstrated promising criminal justice and/or mental health outcomes and are concluded to be promising, but in need of additional empirical research. Still, numerous researchers and practitioners have pointed out treatment and best practice should be influenced by not only knowledge gained by research, but also by ethical considerations.

What is known regarding treatment of both adult and juvenile offenders with mental illness is that this population needs more than just mental health treatment to reduce their risk of recidivism. Researchers have found that, similar to non-mentally ill offenders, offenders with serious mental illness have criminogenic needs, which must be the focus of treatment when the goal is to reduce the risk of future criminal behavior. One treatment model that takes into account these factors is the Risk Need Responsivity Model. The criminogenic needs that have been found to have the largest impact on risk include the Central Eight: antisocial behavior, antisocial personality patterns, antisocial cognition, antisocial associates, family and marital circumstances, school/work performance, leisure/recreational involvement, and substance abuse. Additionally, there is some evidence that suggests offenders with serious mental illness and cooccurring substance abuse have a greater risk for future violent behaviors. Thus, a high priority should be placed on the identification and treatment of these offenders.

The research suggests that treatment for mental health needs should follow best practices for the specific disorders, which have been outlined for the general population. Generally treatment for chronic and persistent mental illness includes the use of psychoactive medications. Among mentally ill offenders, compliance with medication correlates with reduced recidivism. Unfortunately, offenders are generally non-compliant with medication, especially after leaving institutional and residential settings. Studies on improving medication compliance reveal several creative and promising strategies.

Many researchers and practitioners have highlighted the importance of collaboration between criminal justice and mental health. It is also suggested those within the two systems who work with this population be cross-trained in both criminal justice (criminogenic need) and mental health (recognizing and responding to the needs of the seriously mentally ill). Furthermore, continuity between the two systems, in addition to the various points of contact within the systems is recommended. Providing coherent transitions will facilitate continuity in treatment for the offenders with mental illness. This may include linkages or 'boundary spanners,' information sharing practices, and specialized caseworkers.

The literature suggests that offenders should be screened for mental health and substance abuse at each point of contact within the criminal justice system. If indicated, further assessment should include a risk, mental health, and substance abuse assessment. These screenings and assessments will allow for the identification and timely treatment of offenders with serious mental illness. Additionally, treatment at each point of contact will allow for interventions that can assist in preventing further penetration into the criminal justice system. By addressing the unique needs of these offenders, improvements can be made to both mental health functioning and criminal justice(recidivism) outcomes. When we improve functioning and reduce recidivism we decrease costs to the taxpayers and improve the safety of our communities.

How mental health treatment needs should interface with criminogenic needs is not entirely clear and more research and evaluation of promising treatment models is needed. The extant literature does generally suggests that treatment within the criminal justice system must consider mental health needs, not as an alternative to criminogenic needs, but as a treatment responsivity factor. This factor must be considered and remediated to allow for targeted work on the criminogenic needs that lead to the reduction of recidivism. In addition, researchers and legal scholars remind us that it is unethical for custodial and correctional systems to ignore mental health needs. There continues to be debate between the mental health and correctional systems about who is responsible, financially, and ethically, for these offenders. This debate all too frequently results in lack of coordination, leading to offenders with mental illness who are not identified or treated and who continue to struggle, fall thought the cracks, and cycle in and out of both systems for decades, at a huge social and financial cost.

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