

Attention Deficit Disorder Association (ADDA)  
And Its ADHD Correctional Health/Justice Work Group  
White Paper

**Diagnosis and Treatment of Persons with  
Attention Deficit Hyperactivity Disorder  
Within the Jails and Juvenile Facilities of the United States  
Criminal Justice System:  
Why It Matters**

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**INTRODUCTION**

This white paper is based on the following premises:

- Attention Deficit Hyperactivity Disorder (ADHD) is an inherited or acquired, and disabling neurobiological disorder characterized by behavioral symptoms that may persist throughout the lifespan (Barkley, 2006; Harmon, 2012).
- Thirty percent of children with ADHD “mature out” of ADHD while up to 70% of childhood ADHD persist into adulthood (Barkley, 2008, 2010).
- ADHD was historically referred to as Attention Deficit Disorder (ADD) and everything in this white paper applies equally to both ADHD and ADD.
- ADHD is overrepresented in the population of incarcerated individuals in the United States Criminal Justice System when compared to ADHD prevalence in the general population (Barkley, 2008; Brown, 2005, Eme, 2012).
- Behavioral symptoms of ADHD include hyperactivity, inattention and impulsivity, (DSM 5, 2013) which increase the likelihood of this population becoming incarcerated
- Behavioral symptoms of ADHD vary among individuals; the symptoms create unnecessary challenges in our jails and juvenile facilities if left untreated.
- Screening, diagnosis, and treatment using combined approaches of pharmacology and behavioral interventions for ADHD increase the ability of incarcerated individuals with ADHD to benefit from rehabilitation, reduce recidivism, and increase safety for everyone within facilities.
- Treatment works (Westmoreland, 2009; Young, 2011).
- Treatment of ADHD and its inclusion in prerelease planning can improve post release outcomes. (Young et al.; BMC Psychiatry 2011)
- Learning disability (LD) and ADHD are the two most common disabilities represented in correctional facilities and both may be present in one individual. Individuals with LD and/or ADHD do not have an intellectual disability but are typically weak in one or more specific abilities necessary for academic and vocational achievement. Some psychologists believe individuals with LD are more likely to experience problems with sequential or simultaneous processing; while ADHD individuals are more likely to experience problems with planning or attention processing (Goldstein; DeVries; Naglieri, J. 2011).

The scope of this white paper is limited to the justification and advocacy for awareness and evidence-based screening, diagnosis and treatment of those with ADHD in jails and juvenile correction facilities.

## **HISTORY AND PURPOSE OF PROJECT**

In early 2007, the Attention Deficit Disorder Association (ADDA) Board became aware of the number of adults challenged with ADHD currently in the United States correction system and approved the formation of the ADDA Work Group on ADHD and Correctional Health. The work group consists of national experts in correctional health services, ADHD treatment specialists, other mental health and correction/ justice management professionals. The mission of the ADDA Work Group is to:

1. Raise awareness of the overrepresentation of ADHD and need for appropriate screening, diagnosis, and treatment of the disorder in the United States correctional and justice systems.
2. Provide current evidence based information to national policy makers in order to raise the standard of health care for youth and adults, challenged by ADHD, in custody of the justice/correction system.

This white paper, prepared by members of the ADDA Work Group on ADHD and Correctional Health (now referred to as the ADDA ADHD Justice/Corrections Work Group), provides a resource document containing current evidence based practices concerned with the screening, diagnosis and treatment of persons with ADHD to guide policy makers, administrators, and providers in delivering services to youth and adults with ADHD in jails and juvenile facilities. (Refer to Appendix B for Common Definitions Associated with ADHD)

It is recognized that there is a paucity of outcome studies regarding the treatment of ADHD in juvenile and jail settings. Therefore some of the studies referenced in this document are based on samples of non-correctional populations with ADHD.

## **PROBLEM STATEMENT**

There are many persons challenged with ADHD incarcerated within our juvenile facilities and jails. The reasons for this over representation of folks with ADHD within correctional facilities can be easily explained.

Substance abuse frequently leads to arrest (Kramer, 2009; Pew Center on the States, 2009, 2012). In fact, youth and adults with ADHD in the community who have not received evidence based treatments are twice as likely than community peers without ADHD to abuse drugs or become addicted, thus increasing the likelihood of arrest for possession of illegal substances and driving under the influence (Barkley, Murphy, Fischer, 2008).

Individuals challenged by ADHD may demonstrate behavior that is inappropriate for the situation and disturbs the peace of the surrounding community. Behavioral symptoms of ADHD may be interpreted by others as strange, provocative, defiant, or threatening; thus, those with ADHD are more likely to be arrested and detained for relatively minor offenses and status offenses such as truancy. (Refer to Appendix A for a Review of Executive Function and Associated Behavioral Impairments of ADHD.)

In correctional facilities, most inmates with ADHD do not have access to combined approaches of pharmacology and behavioral interventions ( Kramer & Cox, 2010 ) which generally increases the ability of those with ADHD to benefit from rehabilitation, reduces recidivism, and increases facility safety.

Reported prevalence rates of ADHD challenged individuals in correctional facilities vary greatly due to multiple reasons such as inconsistency in assessments (Teplin, L. et al., 2002; Barkley, Murphy, & Fischer, 2008), diagnostic criteria based on the childhood manifestation of the disorder that may not be relevant to the adult manifestation (Barkley, Murphy, & Fischer, 2008; Kessler, et al., 2006; Simon, et al., 2009), and sample sizes too small to generalize. A large study of juveniles (n = 1,829, 1,172 males and 657 females) in Cook County Juvenile Temporary Detention Center in Illinois between November 20, 1995, and June 14, 1998 found a prevalence rate of 16.6% of males and 21.4% of females ( Teplin, Abram, McClelland, Dulcan, & Mericle, 2002). Another large study (n = 11,608) found the prevalence rate to be 18.6% for juvenile males with ADHD in the Texas Juvenile correctional system (Harzke et al., 2012). It is important to note that the preceding prevalence estimates most probably significantly underestimate the true prevalence of ADHD in the juvenile correctional system since they are based exclusively on self-report (Eme, 2013; Teplin et al., 2002). For example, the most recent authoritative clinical practice guidelines for the diagnosis of ADHD in juveniles (4-18) specifies that information should be obtained *primarily* from reports from “parents or guardians, teachers, and other school and mental health clinicians involved in the child’s care” (American Academy of Pediatrics, 2011, p.1).

International prison prevalence estimates for males having screened positively for childhood ADHD are up to 50% for prison populations in Canada, Finland, Germany, Norway, Sweden, and the United States (Young, S. 2011). Prevalence estimates for a current diagnosis of ADHD based upon random samples deemed to be representative of the entire prison population in the country are reported to be 57% in Israel (Einat & Einat, 2008), 30% in Norway (Rasmussen, et al., 2001), and 14% in the United Kingdom (Young, S., 2011). A number of other small studies are limited to screening of young male correction populations (Rosler, M. , 2004) in Germany or other specific incarcerated sub populations and cannot be cited for general prevalence percentages.

In addition, the disparity or shrinkage, in the ADHD diagnosis from childhood to adulthood that has been reported for adults may not be due to their having outgrown the disorder, but having outgrown the criteria for the disorder based on the DSM-IV (Simon, et al., 2009). (*Refer to Appendix D for DSM-IV criteria on ADHD*). Since 2000, professionals in the United States have used the DSM-IV criteria to determine the diagnosis of ADHD in adults. It appears that the March, 2013 release of the DSM-5, by decreasing the adult ADHD criteria from six to five symptoms, will have an overall effect of increasing the number of adults with this diagnosis. (*Refer to Appendix E for a general comparison of criteria for ADHD between the DSM 5 released in May 2013 and DSM IV.*)

## **ADHD TREATMENT IN CORRECTIONAL FACILITIES**

In 2003, Scott Chavez, Vice President of the National Commission on Correctional Health Care (NCCCHC), began an initiative to see if correction facilities are responding to the needs of those in custody in regard to ADHD. He conducted a focus group which developed a survey of 599 jails, prisons, and juvenile detention facilities. Just 23 surveys were returned representing a 3.8% response rate which was inadequate for substantive conclusions but suggests that even as recent as 2003, there were very few facilities, juvenile or adult, where ADHD was newly diagnosed and treated (Chavez, S. , 2003). However with the recent evidence indicating up to 70 percent of childhood ADHD persist into adulthood (Barkley, 2008, 2010) affecting 4.4 percent of the general population, 7% of males and 3% of females in the general population (Polanczyk and Rohde, 2007), it becomes imperative to provide services to the adult ADHD offender.

At the National Conference on Correctional Health Care in 2010, the ADDA ADHD Justice/Corrections Work Group presented an interactive workshop AD/HD Diagnosis and Treatment; Experiences in Implementing an Evidence Based Program of Diagnosis and Treatment (Kramer, J., Cox, J. et al.) to gather participant data on the state of correction facilities' progress on providing screening, diagnostic, and treatment services. The data collected from selected facilities where clinicians stated they did have programs for the identification and treatment of those with ADHD was disappointing. The juvenile facilities more often used specific ADHD screening tools such as the Connors Child and the Connors Adult Screen for aged 15 and above. Just one correctional program of the 20 queried, a forensic mental health unit for incarcerated youth, incorporated cognitive behavioral ADHD focused treatment and pharmaceutical treatment plans specific to ADHD.

## **PRAXIS SOLUTIONS, IMPLEMENTATION, AND BENEFITS**

Solutions to addressing ADHD in the US jail and juvenile justice populations can be described within the following categories: Awareness, Screening, Diagnosis and Treatment including Pharmacological and Psychological Therapy/Interventions comprised of counseling, coaching, and skill development.

### **AWARENESS**

Awareness is a process used to educate staff, administrators, and persons with ADHD about ADHD, its prevalence, its impact on daily functioning in the community and facility, and its effective identification and treatments. For facilities, the educational process should provide clarity for their specific policy and procedures for screening and service provision (Scheyett, A., 2009). For the individual with ADHD it can be a strong engagement tool for treatment (Williams, 2010).

School systems frequently are unaware of the number of their students involved in the juvenile correction system including those with ADHD. Tudisco (2006) identified 28% of youth in three New York juvenile correction facilities had IEPs at intake. The rate is high and strongly suggests that collaboration between the juvenile facilities and schools is needed not only to improve services but also to measure the effectiveness of school interventions. Student progress in the correctional facility needs to be included in a release plan and shared with the receiving school to orchestrate a smooth transition.

Adults and youth moderately or severely challenged with ADHD and/or mental illness upon incarceration and, as part of the plans for release from custody, will need to be linked to services for the disabled in order to successfully transition from jail to the home community. The goal of successful, efficient, cost effective transition to the community for those who are challenged by a disability requires coordination and implementation of multiple community services such as employment and job readiness/education programs, a funding and treatment source for mental health and health services and medication, and supported housing immediately upon discharge from an institution. In the United States, government agencies have acknowledged the need for the availability of these services and in the last 25 years, enabling legislation supporting enhanced community services has had the effect of improving community services. *(Refer to Appendix H for information on several significant legislative initiatives which have improved or hold the promise of improved services.)*

Another important component of awareness is a call for action for correctional facilities providing ADHD focused screening or interventions services to publish their data and present it at conferences of their peers.

## **SCREENING**

Facility staff may observe behavioral characteristics which suggest a newly arrived inmate may have ADHD. *(See Appendix C Traits/Signs of ADHD to Look For On Entrance To Justice System)*

Screening for ADHD is a process to identify those who may have ADHD; however the screening does not confirm a diagnosis of ADHD. In fact, a positive screen indicates the person may have ADHD, some other mental health problem, or ADHD co-morbid with another disorder (Brown, 2000).

Effective screening for individuals challenged by ADHD and, in fact, all health conditions includes the following elements (Eme, 2012):

- Review of individual medical records that are available. This includes transfer medical records from another facility, medication records indicating use of medications to treat ADHD. Frequently individuals who are currently medicated for ADHD or a mental illness will either arrive at the detention facility with a bottle of prescription medication or will have a family member calling the facility with information related to the treatment of ADHD or other mental illness. This is the appropriate time for health staff to verify information about the treatment and diagnosis as well as an opportunity to call the treating professional and verify the use of the medication with the individual's pharmacy. Youth and adults who, on arrival at the facility, are confirmed by medical/pharmaceutical records to be currently on specific medications for ADHD, generally do better in this environment if they are continued on the medication until a mental health professional can evaluate them and continue/discontinue the medications. Providers of mental health services in correction facilities must be encouraged to keep up to date with recent burgeoning ADHD evidence based literature in regard to diagnosis, treatment of ADHD, and co-morbid diagnosis.



Juvenile correction facilities usually receive school records which includes student individual education plan (IEP) in place at the school indicating the diagnosis of ADHD. The fortunate student may have a full treatment plan including medication and psychotherapy with accommodations. Of note, IEP data underestimates the true prevalence of ADHD since it does not include those juveniles who either have a prior diagnosis, not included in the IEP, or who have never been diagnosed.

Interestingly, a one-day survey of the number of male and female youth in the Delaware juvenile correction facilities in 2001 (Kramer, 2010), revealed that 25% of youth entered the facility with an IEP diagnosis of ADHD and an additional 9% were diagnosed with ADHD during the comprehensive psychiatric review by a child/adolescent psychiatrist during the youth's first month of incarceration.

- Review of health history with the entering adult or adolescent. The history includes a structured inquiry in regard to chronic illness and medications requiring continued treatment, risk of or previous history of suicide, and observation of behaviors and illness/injury that may pose a risk to the individual or others. The receiving screening required at the time of admission of an individual to a correction facility is intended to “identify and meet any urgent health needs of those being admitted” and “to identify and meet any known or easily identifiable health needs that require medical intervention prior to the health assessment” (National Commission on Correctional Health Care, (2008) *Jails*, page 61) and is conducted as soon as possible on admission to a correctional facility by health professionals in facilities where health professionals are available and by health trained correctional staff members if health staff are not available in the facility.
- Use of a standardized screening questionnaire is particularly helpful in identifying adults with ADHD who haven't been previously identified. For adults and juveniles 18 years of age or older, facilities may incorporate a brief and inexpensive screen such as the World Health Organization Adult Self-Report Scale Screener which is a short 6-item self-rating scale (*Appendix G*) measuring the frequency, and not the severity, of symptoms into the intake process. The scale, based on the DSM-IV (*Appendix D*), is consistent with the DSM-5 (*Appendix E*) criteria for ADHD. There is additional evidence for the scale having validity and consistency (Murphy, K.R., Adler, L.A., 2004).

Other options include the following:

The Adult ADHD Self-Report Scale-V1.1 (ASRS-V1.1), a validated, 6-question screen for adult ADHD. Hines et al. (2012) analyzed this tool for evaluating patients in a busy primary care setting and found it took adult patients 55 seconds to complete and the screen was a highly sensitive screen with moderate specificity.

The current 2011 Barkley Adult ADHD Rating Scale—IV (BAARS-IV) which has a screening module

Note that at this time, no standardized screening instruments for ADHD have been ‘validated’ on prison populations and this is a limitation that needs to be acknowledged in any published studies.

For youth and adults (Eme, 2012), it is recommended that juvenile and adult corrections initially develop a screening protocol that is compatible with the existing mental health screen and includes the following:

*Are you easily distracted?*

*Do you have difficulty sustaining attention?*

*Do you have difficulty prioritizing work?*

*Do you have trouble planning ahead?*

*Do you have difficulty completing tasks on time?*

If the individual indicates that these problems occur often or very often, this is indicative of possible ADHD (Barkley, 2010, Barkley, Murphy & Fischer, 2008) and warrants referral for a more comprehensive confirmatory evaluation.

Some juvenile facilities currently use the Connors 3 TM Rating Scale for juveniles available through several commercial distributors. “The Connors 3 is a well-designed instrument with excellent technical properties that promises to be instrumental in the evaluation, diagnosis, and treatment response of children with ADHD and co-morbid disorders.” ( Arffa, (2013)

Professional organizations and agencies nationwide have urged detention centers to identify at risk youth at intake to secure the safety of staff as well as the long-term well-being of detained youth. (Williams, 2010)

Note:

The most widely used screening tool in juvenile justice, the *Massachusetts Youth Screening Instrument, 2nd Version referred to as MAYSI-2* (Skowrya & Coccozza, 2007), fails to adequately screen for ADHD although it does screen for other major mental illness diagnoses including PTSD and substance abuse disorders which frequently are co-morbid with ADHD. If the *MAYSI-2* is used either on admission or as part of the mental health evaluation which occurs prior to day fourteen of the admission, the questions listed above may be used to screen for ADHD.

Finally facilities, not using a planned ADHD screening on admission or as part of their health or mental health assessment, are encouraged to screen the following individuals:

- Those with self-reported attention problems. Attention problems are the single most important symptom cluster for identifying ADHD beyond childhood (Barkley, 2010; Barkley, Murphy & Fischer, 2008).
- Inmates with behavioral symptoms which frequently result in disciplinary action.
- Those who display hyperactivity or inability to concentrate on a task while in confinement
- Inmates who frequently return to custody especially those who have functional violations related to not following stipulations of probation and parole such as keeping appointments or misdemeanor charges.

- Those who return to custody for recurrent alcohol related violations and/or cocaine use
- Inmates who do not respond to treatment for other mental health disorders or behavioral problems

## **DIAGNOSIS AND TREATMENT PLANNING**

Assessment/diagnosis is the act of determining the nature and causes of a client's problem (Lewis, 1994) and is the first active phase of treatment requiring intensive time and skill beyond initial screening. ADHD is defined by the core signs of inattention, hyperactivity, and impulsiveness.

Typically, assessment is completed by a licensed mental health professional or, in smaller institutions, may be based on a structured interview by a trained interviewer supervised by a licensed mental health professional. A useful example of this type of interview is the Mini International Neuropsychiatric Interview–Plus, a fully structured instrument to assess the presence of mood disorders, anxiety disorders, somatoform disorders, substance use disorders, psychotic disorders, eating disorders, conduct disorder, and adjustment disorder. The MINI-Plus employs different time frames for various disorders including current, past, or lifetime (Sheehan, 1998).

In correctional settings, it is often challenging to obtain the historical data necessary to make an ADHD diagnosis. Diagnosing an adult with ADHD can be difficult as an adult must have childhood-onset, persistent, and current symptoms. Further complicating the issue, ADHD often co-exists with other conditions. The professional must effectively differentiate ADHD in individuals with dual-diagnosis. Co-morbidity can complicate symptom presentation and hinder identification of adult with ADHD. Differentiating between diagnoses, e.g. between ADHD and personality disorder, requires distinct, evidence-based diagnostic tools with ADHD criteria specific to adulthood. Disorders often seen among persons with ADHD include substance abuse, oppositional defiant disorder and conduct disorder, learning disorders, anxiety, depression, epilepsy, tic disorders and Tourette's syndrome.

Youth screened positive for ADHD are frequently difficult to diagnose with ADHD due to the impact of adolescent development on the individual's behavior and emotional stability. Professionals with an understanding of adolescent development and ADHD and an ability to comfortably interact with youth are most effective in making the diagnosis of ADHD.

In the past 10 years, computerized neuropsychological tests and other psycho-physiological studies have gained support for ADHD assessment because they are viewed as less subjective and more pragmatic (Chandler, 2010). However, these tests and studies have not been tested with a more varied client base, are many times inconsistent thus requiring interpretation by the researcher/company which devised the test and need more intense study before any of them can be accepted as evidence based diagnostic tools for ADHD. Highly respected experts and researchers in the ADHD field, such as Barkley, R. (2008) and Brown, T. (2005) continue to be skeptical of the validation of these studies.

A clinical assessment resulting in a differential diagnosis of ADHD is only effective if it is followed by the establishment of an individualized treatment plan based on the findings of the assessment that includes an array of evidence based behavioral and pharmacological interventions.

## **TREATMENT**

Effective treatment for the offender with ADHD focuses not only best practices in overcoming impairments in executive/management functions (*reference Appendix A for examples*) associated with ADHD but also impairments in co-occurring psychiatric disorders (Westmoreland, P., 2009).

Co-morbidities in ADHD are common and must be diagnosed, assessed, and integrated into treatment plans which, utilizing best practice standards, advocate concurrent treatment of ADHD and the co-occurring disorder/s as well as propose regular evaluation of individual progress in reducing the identified behavioral symptoms. A common treatment error is instituting the stepwise treatment of first substance abuse followed by eventual treatment of other mental illnesses. Stepwise treatment is not supported by evidence. It is considered ineffective treatment. (National Institute of Drug Abuse, 2006 and 2009)

## **PHARMACOLOGIC TREATMENT**

The efficacy of medications for alleviating the symptoms of ADHD and for improving adherence to other treatment programs is well established. Medication is the cornerstone of ADHD treatment. (Meszaros, 2009; National Institutes of Health, 2007)

The impact of medication on the person with ADHD is reported by Young et al. (BMC Psychiatry, 2011). The primary treatment effects recorded in drug treatment trials are improvements in levels of attention and reduction of hyperactivity and impulsive behaviors. Studies have also documented a wider range of improvements on social and academic function and an individual's overall sense of well-being. Some studies have specifically reported on reductions in aggressive behavior. An important series of studies investigated mood symptoms in addition to core ADHD symptoms and found similar effect sizes for both sets of symptoms when treating adults with ADHD with either stimulants or atomoxetine (Reimherr, 2005, 2007).

Lichtenstein, et al. (2012) compared the rate of criminality for 25,656 patients with a diagnosis of ADHD during periods they received medication with times when they were medication free. Findings demonstrate decreases in impulsive urges which may also prevent individuals from engaging in illegal acts. The study did not show the same violence prevention ability for those with ADHD taking antidepressant medications as an alternative to stimulants. Lichtenstein's findings (2012) support Admire's previous observations (2006) that youth and adults who are arrested/detained and not recognized and treated for their ADHD are much more likely to return to the justice and correctional system.

ADHD medications are grouped into two major categories - stimulants and non-stimulants. The first line of pharmacological treatment is stimulant medication such as methylphenidate and

amphetamines (American Academy of Pediatrics, 2011; Eme, 2011) which both increase dopamine and to a lesser extent norepinephrine. The pharmacological treatment of children with ADHD has also been proven to be efficacious with adults.

Atomoxetine (Strattera) is the first non-stimulant approved for ADHD. One of the selling points is that it is not a controlled substance. However, unlike both methylphenidate and amphetamines which in their immediate-release form take 20 – 30 minutes to start working, atomoxetine takes three to four weeks with maximal effect seen as late as six to eight weeks. The slow onset of effect substantially decreases adherence to this particular medication. But, it may make this medication less of a contraband risk in correctional settings while providing the initial pharmacologic treatment for those with ADHD who will be under supervision in correctional/treatment facility for over 2 months. *(See Appendix F for a list of ADHD medications which are approved for use by the Food and Drug Administration.)*

Studies have shown that medication is a protective factor for preventing adult mental illness among children with ADHD. Biederman et al, (2009) concluded that medication treatment protects children with ADHD from developing additional psychiatric disorders including major depression, multiple anxiety disorders, oppositional defiant disorder, and conduct disorder during the 10-year follow-up period. In fact, treated children were only about one-fifth as likely as non-treated children to develop any of these disorders and these differences were all statistically significant. Treated children were also less likely to have repeated a grade. This was true even though treated and untreated children did not differ at baseline on several factors that might be associated with the development of additional difficulties over time.

The influence of the childhood treatment of ADHD with stimulant medications and the effect of this treatment on the development of substance abuse later by the ADHD individual has been an ongoing concern (Goldstein, B. 2013). The Multimodal Treatment Study of Attention-Deficit/Hyperactivity Disorder (MTA) studies by Molina et al. (2007, 2013) confirmed the efficacy of stimulant treatment for behavioral symptoms of ADHD but did not provide any evidence that ADHD medication protects from, or increases risk for, adolescent substance use or substance use disorder. Treatment as part of the study stopped at 14 months but was continued by many of the subjects on their own through community resources. However the study also described a re-emergence of delinquent behaviors for some after treatment was stopped.

‘As with any mental disorder, it is unwarranted to prescribe ADHD medications in the absence of distinct target symptoms or when placement and mental health follow-up services are unclear. Issues that are particularly relevant with detained youth include weighing the risks and benefits of the proposed psychotropic medication: the risk of overdose, side effects, anticipated youth and family compliance with medication and follow-up treatment, prescription coverage and health plan benefits, and the potential for diversion (e.g., psychostimulants).’ (NCCHC Guideline: Adolescent ADHD, October, 2013)

Overall the effectiveness of stimulants or atomoxetine, a non-stimulant, in adults compares well to other drug treatments for mental health disorders, such as the use of antidepressants to treat depression. For this reason, expert reviews conclude that drug treatments for ADHD in adults are the first line choice when considering treatment options. (Goodman, 2012; Faraone and Upadhyaya, 2007) This is particularly true when treating people with ADHD with severe levels

of impairment and/or associated behavioral problems when implementing rapid and effective treatments is thought to be most important. (Banaschewski, 2006; Young, S., 2011; National Institute of Clinical Excellence - NICE Report, NICE guideline 72, 2009)

Adult prescriptions for stimulants and other medications require special considerations. For example, adults often require other medications for physical problems, such as diabetes or high blood pressure, or for anxiety and depression. Some of these medications may interact badly with stimulants. These and other issues must be taken into account when a medication is prescribed (Booklet – Attention Deficit Disorder, U.S. Department of Health and Human Services National Institutes of Health, 2011)

## **SPECIAL ISSUES RELATED TO STIMULANT MEDICATIONS IN CORRECTIONAL SETTINGS**

Prescribing controlled substances in correctional settings can create challenges for security, nursing, and psychiatric staff. Some inmates, including those with functionally significant ADHD, however, can benefit from such treatment.

Appelbaum described one very conservative approach to stimulant treatment in state prison male population in two maximum, seven medium, and four prerelease or minimum security prisons in Massachusetts (Appelbaum, 2009, 2011). His protocol for the treatment of prison inmates with ADHD addressed a broad range of concerns including disparate diagnostic and treatment standards among prison psychiatrists, conflicts between stakeholders, medication misuse, and substance abuse among inmates. Appelbaum recommends that psychiatrists can reasonably reserve stimulants for inmate patients who have failed an adequate trial of one or more non--stimulant medications or have a contraindication to such trials. With his evaluation and treatment approach he believes that less than 1% of all prison inmates will require stimulant medications. He found that a protocol that provides criteria in four main areas: diagnosis, current functional impairment, treatment in general, and treatment with stimulants was especially useful for the staff psychiatrists who referred inmates with ADHD for stimulant medication.

The United Kingdom National Institute of Clinical Excellence (NICE) consensus statement, from senior representatives of the Department of Health, Forensic Mental Health, Prison, Probation, Courts and Metropolitan Police services includes a stepwise process for the treatment of ADHD within the United Kingdom where inmates with moderate to severe ADHD have been treated with stimulant medications . The objectives of NICE was to raise awareness about adult ADHD, and its recognition, assessment, treatment and management within these respective services and encourage other countries to use the United Kingdom experience as an outline for their plans (Young, S., 2011)

NICE (Young, S., 2011) statements supporting the treatment of adults with ADHD in prison, probation, and the community with the most appropriate pharmacologic treatments emphasize-

- Correctional settings using methadone interventions have already demonstrated a capacity for providing this level of security.

- The abuse potential for stimulants is often overstated and usually by professionals who are not familiar with the effects of stimulants in the treatment of ADHD (Wilens, Farone, 2003). There is therefore no indication that stimulants are addictive when prescribed for the treatment of ADHD. Overall the potential benefits of treatment, particularly in highly impaired individuals, appear to greatly outweigh the potential risks. (Lichtenstein, P., 2012)
- Risk assessments for medication abuse should, however, be carried out in each individual case and consideration given to the particular drug formulations prescribed.

Besides atomoxetine (Strattera) which is a non-stimulant and long acting formulation, another option is utilizing stimulant formulations which cannot be easily extracted for injection including methylphenidate OROS (Concerta) or skin patches (Daytana) and long acting lisdexamphetamine (Vyvanse). These may prove to be preferable ADHD medications in large adult correctional institutions. Where medication is administered at specific times, therapeutic use can be evaluated by urine screen and regular behavioral evaluation by mental health professionals in consultation with correction staff will be useful in determining the therapeutic response to treatment.

In summary, in correctional settings a process for drug administration must be established that manages the risk of institutional contraband when using amphetamine based medications for ADHD. Using medication formulations that are crushable and taken with soft food or are liquid and can be mixed with food at the time of administration can reduce but not completely eliminate the contraband risk.

Those who develop and administer correction policy must consider the justification and future legal consequences of failing to provide prescribed pharmacologic treatment for the correctional inmate with ADHD. (*See Appendix H for facts about the ADA.*)

## **PSYCHOLOGICAL INTERVENTIONS**

Because the focus of this paper is on juvenile correction facilities and adult jails, institutions that have shorter length of stay compared to prisons, it is important to remind readers that the duration of incarceration may preclude the implementation of some of the psychological interventions proven effective for persons with ADHD. Moreover, those with short term stays should be treated respectfully by staff and receive prescribed medications regularly and without interruption. Inmates entering the facility on verifiable prescription medication continue to receive the medication in a timely fashion as prescribed, or acceptable alternate medications are provided as clinically indicated (NCCHC Standards for Mental Health Services in Correctional Facilities, 2008, p. 43, MH-D-02).

Persons are frequently jailed for minor charges because of apparent emotional instability, inebriation, or provocative behavior which may be caused by illness such as low blood sugar, seizure disorder, alcohol or drug intoxication, a disability such as ADHD, serious mental illness or injury such as head trauma. For example, a recent study by Harmon (2012) reports approximately 60 percent of adults in prison have had at least one traumatic brain injury and even higher prevalence has been reported in some systems. These injuries, which can alter

behavior, emotion, and impulse control, may contribute to increased sentences and recidivism (Harmon, K. 2012).

Comprehensive treatment for persons with ADHD includes a combination of pharmaceutical and behavioral therapies to address the impairments resulting from ADHD and co-occurring disorders (Barry & Gaines, 2008; Molina, et al., 2007, Brooke, S., 2013)

Mental health treatment within correctional systems is aimed at improving strategies for self-control and reduction of antisocial attitudes and behaviours arising from the combination of trauma, mental illness and neurocognitive disabilities, for example- ADHD, learning disabilities, autism. Although there is a scarcity of well-controlled research on the efficacy of psychological treatments to address the impairments of persons with ADHD, experts in the field, and the research that does exist support cognitive behavior treatments, applied behavior analysis, and coaching as well as specific psychological interventions for co-occurring mental health issues (Safren, S. et al., 2010; Barry, Gaines, 2008; Gaines, 2008; Solanto, M. et al. (2010); Knouse, 2010).

The cited benefits of these interventions include:

- Assisting individuals to challenge their cognitive distortions and modify dysfunctional behaviors (Rapport, Chung, Shore, & Isaacs, 2001), particularly in the setting of psychiatric co-morbidity (Rostain & Ramsay, 2006).
- Improve self-regulation, control impulses, consider future consequences and the ability to negate the influence of peers; improve rule governed behavior and otherwise have an impact on the negative behaviors associated with ADHD (Barry & Gaines, 2008).
- Help individuals understand the disorder and address specific problems inherent to ADHD, such as time management issues, temper outbursts, poor self-esteem, and relationship issues (Kolar et al., 2008).
- Learn how to organize his or her life with tools such as a large calendar or date book, lists, reminder notes, and by assigning a special place for keys, bills, and paperwork. (NIMH, Brochure 2011, Attention Deficit Hyperactivity Disorder, section Education and Psychotherapy)
- Learn to break down large tasks into more manageable, smaller steps so that completing each part of the task provides a sense of accomplishment (NIMH, Brochure 2011, Attention Deficit Hyperactivity Disorder, section Education and Psychotherapy).
- Change one's poor self-image by examining the experiences that produced it. The therapist encourages the adult with ADHD to adjust to the life changes that come with treatment, such as thinking before acting, or resisting the urge to take unnecessary risks (NIMH, Brochure 2011, Attention Deficit Hyperactivity Disorder, section Education and Psychotherapy).



The successful following of rules and the demonstration of appropriate behavior and language are the primary indicators used in the adult and juvenile justice system to determine successful treatment completion.

Programs are available that provide advice on how to adapt cognitive behavior treatments, applied behavior analysis, and coaching to support adolescents and adults with ADHD in corrections (Solanto, M.V., 2011, Tuchman, A., 2007, Rostain, A., Ramsay, R., 2006). Adapting the programs to the routine of the specific correctional system, incorporating the program with other therapeutic programs, and then evaluating the short term benefit of the program for inmates with ADHD who participate is in its infancy in the United States but have recently been strongly encouraged by the Council of State Governments Justice Project (Osher, 2012).

## **ADHD TREATMENT PROGRAMS IN JUSTICE/CORRECTION SETTINGS**

As mental illness, substance abuse, and behavioral disability treatment in correctional settings is developed, we need to re-evaluate our mission in relation to comprehensive treatment. Recently treatment modalities have emphasized outcome driven programming to promote public safety by reducing recidivism through effective programming and supervision. However, the goals of promoting public safety and reducing recidivism, although worthy, have been interpreted by institutions as treatment to manage relatively acute flares of mental illness, situational depression and suicidal ideation.

Many institutions have not dealt with long term comprehensive treatment issues of more complex mental illness and neurodevelopmental behavioral disabilities because correctional institutions have never been developed as mental hospitals and generally do not have the mental health treatment staff to support this level of treatment.

Currently, there are a number of programs in Europe which are focused on the identification, evaluation and treatment of those with ADHD in the justice system. Phil Anderton (2007) identified key elements of the more successful comprehensive programs:

- “Rigour at the assessment stage, with psychological assessment as a key element, have proven benefits
- Structured programmes are beneficial to this population, people with ADHD perform well under a system that provides scaffolding and support
- The use of medication for people with ADHD should not be seen as negative. European evidence suggests this can and does work.”

Experience in Europe also supports the following:

- Inclusion of a strong and managed physical regime
- Mentoring by trained staff, trained in ADHD and its unique requirements for the patient
- Peer led support/buddying, proven to be acceptable if the understanding of the ADHD is there and this has advantages for both participants in terms of motivation and therefore longer-term result

*(See Appendix I for more detailed descriptions and contact information of the following three ADHD treatment programs developed for correctional facilities.)*

**CHOICES** developed by the Learning Disabilities Association of Washington State, 1987- 2010 was originally used by the Honorable David Admire in the Superior Court of King County, Washington State, as a diversion program for adults who screened positive for ADHD and were charged with non-violent misdemeanor and low level felony offenses in lieu of pre-trial incarceration. The Choices program is now being used in several California level V facilities and in several other countries within diversion systems, e.g. New Zealand and Australia.

The **R&R2 ADHD** (The Reasoning & Rehabilitation Program) was started as a randomized controlled trial in Iceland. Preliminary results from a community pilot study of R&R2 showed it to be effective in treating ADHD adults with co-morbid difficulties, with the effect continuing to improve at three-month follow-up. Eventually the program was field tested in forensic psychiatric settings in England and prisons in several areas of Great Britain and is now available in a manual format by the Cognitive Center of Canada. They have developed trainer guides and certifications for use in programs as well as for instructors trained by the Cognitive Center of Canada.

The **Delaware ADHD Corrections Project** (previously known as The ADHD Harm Reduction Project) was developed by the Attention Deficit Disorder Association in partnership with the Delaware Center for Justice as a pilot project in 2010 in re-entry units of adult correction facilities in Wilmington, Delaware. The dual project goals are to increase the understanding of ADHD and its impact on inmates in local correction facilities, and to work with the identified inmates challenged with ADHD to help them understand the impact of the ADHD on their lives and access local and WEB resources for a successful and planned re-entry back to the community. It is expected that this program will expand to other correctional facilities in Delaware, both adult and juvenile, and promote the development of pro-social community programs which will support the offender with ADHD who is returning to the community and their families/social network.

## **SUMMARY**

Addressing ADHD within jails and juvenile facilities of the United States criminal justice system does matter. By screening and diagnosing ADHD among this population and providing effective interventions, our jails and juvenile facilities can become safer environments for inmates and for staff. Inmates who receive individualized treatment for ADHD have a greater chance of successful transition back to the community, and recidivism can be reduced, thus limiting the rampant overcrowding of our facilities.

Young (2011) summarized the major benefits associated with effective treatment of ADHD in the correctional setting as follows:

- Reduction of symptoms that impact adversely on behavior in the prison setting (e.g., impulsive responding resulting in critical incidents)
- Increased participation in rehabilitative programs due to a reduction of the symptoms from ADHD and its co-occurring disorders and disabilities

- Reduction of co-morbid disorders
- Increased security, education, treatment, and correctional staff awareness to the problematic behaviors associated with ADHD and actions to reduce them
- Increased post release success under supervision in the community, reducing drug use and recidivism

Screening tools such as the simple five questions described by Eme (2012) for juvenile corrections document or the ASRS Screener (*Refer to Appendix G*) and the Barkley Quick-Check for ADHD Diagnosis screening tool (Barkley, 2011) combined with careful review of admission data and observation will serve as a solid base from which to begin. When screening information suggests the presence of ADHD, referral for assessment is the next step.

Assessment can be done in-house, when available, or contracted with outside providers. The tests and/or interviews used are dependent on the resources available to each setting. In some cases licensed professionals are available and in other settings structured interviews completed by supervised interviewers are conducted. Historical data is important to the process and is often challenging to obtain.

Combining pharmacological and behavioral interventions is best practice in the treatment of ADHD. Building a positive and healthy relationship that acknowledges the importance of each unique individual and their needs in the treatment plan is imperative. The person with ADHD then works with the provider to establish a treatment plan consisting of individualized behavioral goals and interventions, as well as agreed upon pharmacologic interventions.

Psychological interventions are less researched than pharmacological treatments. Well established, however, is the importance of building a positive and healthy relationship that acknowledges the importance of each unique individual. We know that relationships, built on honesty and trust, satisfy the human need for safety and security. As available, cognitive behavioral treatment, applied behavioral analysis, and coaching are interventions to consider within correction/justice facilities and in the community.

Providing training and education on ADHD for criminal justice staff is necessary and will have an important influence on the current justice system. As more health service providers including academic professionals are engaged within justice/correction settings, the skills, the competency of correction, justice, and health staff will be enhanced in regard to the understanding of and treatment for the mentally ill and disabled. Diversion programs for nonviolent offenders will increase.

Finally the authors agree with Valle (Valle, 2013) who states, “The real mission of treatment in correctional facilities should be recovery management, maintenance of health, and sustainable change.” To accomplish this mission, the correction and justice system must coordinate with the community from which the individual in custody came and the community resources and aftercare to which the individual is released. This has been done poorly in the past, even for short term facilities such as jails and most juvenile correction facilities, and is a major challenge for the future. Rejection of this mission will result in increases in the number of those in custody and supervision, and further isolation of offenders from their families, community, and treatment resources.

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## Appendix A

### EXECUTIVE FUNCTIONS & IMPAIRMENT

Executive Functions & Impairment	
Executive Functions (Brown, 2005).	Associated Behavioral Impairment (Eme, 2007)
Activation:	Lack of organization, failure to initiate or prioritize tasks, procrastination
Focus:	Inability to attend, lack of sustained attention to tasks
Effort:	Failure to sustain effort, lack of follow through, inability to complete tasks
Emotion:	Poor emotional regulation, low frustration tolerance, explosive temper, irritability, suggestibility, physical restlessness
Memory:	Inability to judge consequences of behavior, poor time and financial management, inability to plan for the future
Action:	Impulsive, thrill seeking, impatient, inability to delay gratification, insatiable, inability to control behavior even when a poor outcome is recognized

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## Appendix B

### COMMON DEFINITIONS ASSOCIATED WITH ADHD

Accommodation, also known as compensatory strategy, is an adjustment to a routine or the environment in order to improve a disabled person's ability to succeed.

Assessment is the act of determining the nature and causes of a client's problem (Lewis, 1994) and is the first active phase of treatment.

Attention Deficit Hyperactivity Disorder is a neurobiological disorder that impairs the brain's executive /management functions thereby impairing self-regulation and self-control. (Brown, 2005)

Cognitive Behavioral Therapy (CBT) is a therapeutic approach that attempts to solve problems resulting from dysfunctional thoughts, moods, or behavior through brief, direct, and time-limited structured counseling. CBT is often outlined in manuals to promote reliable implementation. It can be used to address specific problem areas such as anger management, criminal thinking, addiction, relapse, and relationships.

Co-morbidity is the presence of one or more disorders (or diseases) in addition to the primary disease or disorder, e. g. ADHD and anxiety.

Computerized neuropsychological tests utilize standardized computer testing of frontal lobe tasks that characterize ADHD such as visual memory, verbal memory, complex executive functioning, complex reasoning, psychomotor speed, reaction time and cognitive flexibility to compare to evaluations of non ADHD clients of the same age.

Conduct disorder (CD), refers to a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms are violated (Farrington, 2009).

Disability is a physical or mental impairment that substantially limits one or more major life activities.

DSM-IV (*Diagnostic and Statistical Manual of Mental Disorder, 4<sup>th</sup> Ed.* 1994) The 1994 diagnostic manual from the American Psychiatric Association which was replaced in May 2013 by the DSM 5.

DSM 5 (*Diagnostic and Statistical Manual of Mental Disorder, 5<sup>th</sup> Ed.* 2013) is the current diagnostic manual from the American Psychiatric Association.

Evidence-Based Practices (EBPs) refers to clinical interventions or administrative practices for which consistent scientific evidence demonstrates that, when they are implemented correctly, expected and desired outcomes are achieved. EBPs stand in contrast to approaches that are based on tradition, convention, belief, or anecdotal evidence.

Executive function (EF) refers to various brain mechanisms that prioritize, integrate, and regulate other cognitive and behavioral functions in much the same way as an orchestra conductor regulates orchestra members.

Functional imaging studies compare structural changes in the brain with functional impairment utilizing single proton emission computed tomography (SPECT), positron emission tomography (PET) and functional magnetic resonance imaging (fMRI) technology.

Hyperkinetic Disorder (HKD). The ICD-10 name for ADHD. This describes the combined type as defined by the DSM-5.

ICD-10. (*The International Statistical Classification of Diseases and Related Health Problems*) The classification system of the World Health Organization. (WHO)

Impairments of ADHD are the consequences, outcomes or social costs that ensue for the individual as a result of the cognitive-behavioral symptoms of ADHD. Barkley (2008) p. 133

Individualized Education Program (IEP), an educational plan, developed with special education staff, parents and the child for children with a disability such as ADHD or Learning Disability. The IEP has goals and objectives with targets for intervention and is usually developed for a specific period of time-usually one year.

Learning Disability (LD) is a term describing a disorder in one or more of the basic brain processes involved in understanding or using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. (Individuals with Disabilities Education Act Amendments, 1997)

Neurobiological means inherited brain variations or acquired brain changes—for instance, the individual is either born with ADHD (80%) or acquires the disorder (20%) (e.g. brain trauma ). (Barkley, 2006)

Neurocognition refers to the higher brain functions: learning, remembering, concentrating, solving problems, and making decisions. Neurocognitive processes are active in virtually all of our day-to-day activities.

Oppositional Defiant Disorder (ODD) A DSM diagnosis that describes disobedient, hostile, and defiant behavior towards authority figures which goes beyond the bounds of normal childhood behavior. This is often seen with ADHD.

Psychophysiological studies measures the action potentials generated in the brain by measuring the electrical activity through surface electrodes (EEG) placed on the scalp of the client as the client responds to tasks.

Symptoms of ADHD are the behavioral expressions with the disorder—“they are the actions demonstrated by those having the disorder that are believed to reflect that disorder (e.g., inattention, distractibility, impulsive responding, hyperactivity, poor executive functioning).” Barkley (2008) p. 133

## Appendix C

### **TRAITS/SIGNS OF ADHD TO LOOK FOR ON ENTRANCE TO JUSTICE SYSTEM**

Over talkative.

Over emotional.

Pockets full of paper scraps, change, and large number of keys. Probably doesn't know what most of keys are for.

Wallets/purses stuffed full of an assortment of random items.

Lacks structure or stability in residence and jobs.

Requires directions to be repeated (or in sequence)

Rap sheets are long as they get older- frequent failure to appear, resisting arrest, driving under suspension/revocation, assaults and eluding.

Short tempered but usually does not last long.

Likes to stay up late and is difficult to get up in morning.

May leave out important details in stories or get off topic.

Seem to do better in structured environments such as prison.

(Patrick Hurley, 2007)

Eme, R., Hurley, P., Kramer, J. (2007) ADHD & The Criminal Justice System, presented October 15, 2007, National Conference on Correctional Health Care, Nashville, TN.

## Appendix D

### DIAGNOSTIC CRITERIA AND SYMPTOMS OF ADD / ADHD

A diagnosis of ADD/ADHD requires that an individual meet the criteria requirements listed in the DSM IV-TR (Diagnostic and Statistical Manual of Mental Disorders) published by the American Psychiatric Association in 1994.

#### **DSM-IV-TR Criteria for ADHD.** Either A or B

**A.** Six or more of the following symptoms of inattention have been present for at least 6 months to a point that is disruptive and inappropriate for developmental level.

#### **Inattention**

- Often does not give close attention to details or makes careless mistakes in schoolwork, work, or other activities.
- Often has trouble keeping attention on tasks or play activities.
- Often does not seem to listen when spoken to directly.
- Often does not follow instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions).
- Often has trouble organizing activities.
- Often avoids, dislikes, or doesn't want to do things that take a lot of mental effort for a long period of time (such as schoolwork or homework).
- Often loses things needed for tasks and activities (e.g. toys, school assignments, pencils, books, or tools).
- Is often easily distracted.
- Is often forgetful in daily activities.

**B.** Six or more of the following symptoms of hyperactivity-impulsivity have been present for at least 6 months to an extent that is disruptive and inappropriate for developmental level.

#### **Hyperactivity**

- Often fidgets with hands or feet or squirms in seat.
- Often gets up from seat when remaining in seat is expected.
- Often runs about or climbs when and where it is not appropriate (adolescents or adults may feel very restless).
- Often has trouble playing or enjoying leisure activities quietly.
- Is often "on the go" or often acts as if "driven by a motor."
- Often talks excessively.

## **Impulsivity**

- Often blurts out answers before questions have been finished.
- Often has trouble waiting one's turn.
- Often interrupts or intrudes on others (e.g., butts into conversations or games).

**II.** Some symptoms that cause impairment were present before age 7 years.

**III.** Some impairment from the symptoms is present in two or more settings (e.g. at school/work and at home).

**IV.** There must be clear evidence of significant impairment in social, school, or work functioning.

**V.** The symptoms do not happen only during the course of a pervasive developmental disorder, schizophrenia, or other psychotic disorder. The symptoms are not better accounted for by another mental disorder (e.g. mood disorder, anxiety disorder, dissociative disorder, or a personality disorder).

Based on these criteria, three types of ADHD are identified:

1. ADHD, *Combined Type*: if both criteria 1A and 1B are met for the past 6 months
2. ADHD, *Predominantly Inattentive Type*: if criterion 1A is met but criterion 1B is not met for the past six months
3. ADHD, *Predominantly Hyperactive-Impulsive Type*: if Criterion 1B is met but Criterion 1A is not met for the past six months.



## Appendix E

### ADHD DIAGNOSTIC CRITERIA CHANGES OF DSM-5

*Note-In the previous Diagnostic Manual for Psychiatric Disorders DSM IV, published in 1994, ADHD was listed with the disruptive behavior disorders including Oppositional Defiant Disorder and Conduct Disorder. Due to advances in the general understanding of ADHD, the DSM-V now includes ADHD in Neurodevelopmental Disorders.*

#### **Major adjustments of DSM-5 criteria required to make the ADHD diagnosis:**

- The DSM 5 criteria for ADHD compared to the DSM IV criteria for ADHD have been modified to include a better description of the Core symptoms of both the inattentive and the hyperactive impulsive type of ADHD in older adolescents and adults.\*
- The DSM 5 decreases the number of symptoms required for the diagnosis of ADHD in those age 17 or above from 6 to 5. The symptoms must be present for at least 6 months to a degree judged to be inconsistent with an individual's developmental level.
- The DSM 5 now states that several inattentive or hyperactive-impulsive symptoms are present by age 12. By comparison, the DSM-IV required the symptoms to be present by age 7 and required the symptoms to cause impairment.
- "Several inattentive or hyperactive-impulsive symptoms are present in two or more settings." The DSM-IV required the symptoms to impair functioning in multiple settings.
- Description for level of impairment has been modified from the DSM-IV "clear evidence of clinically significant impairment in social, academic, or occupational functioning" to "clear evidence the symptoms interfere with, or reduce the quality of social, academic, or occupational functioning."
- Significantly the new DSM-5 criteria for ADHD recognizes that ADHD is a lifelong problem with individuals having various severity level of symptoms over time with the requirement to specify the severity level as mild, moderate, or severe in regard to symptoms beyond those required to make the diagnosis and level of impairment in functioning.

#### **Several Examples of Age adjusted Symptoms in DSM 5:**

CHILD	OVER AGE 17 / ADULT
Runs or climbs in inappropriate situations	Feeling of restlessness
Blurts out answers before questions completed	Completes people's sentences
Forgetful in daily activities	Forgets to return calls, to pay bills, keeping appointments

#### **How Will These Diagnostic Changes Affect Diagnosis and Treatment in Corrections?**

Because the DSM 5 was published within the month the White Paper was completed, the authors of the White Paper cannot comment with great certainty. However, the DSM 5 modified criteria now supports the origin of ADHD symptoms as developmental and supports the evaluation of the symptoms in regard to the level of functional impairment the symptoms cause. Individuals motivated to change behavioral symptoms can learn to modify the behavior by learning skills and alternate treatment such as cognitive behavioral treatment and medications.

## Appendix F

### ADHD MEDICATIONS APPROVED BY U.S. FOOD AND DRUG ADMINISTRATION (FDA)\*

<u>Trade Name</u>	<u>Generic Name</u>	<u>Approved Age</u>
Adderall	amphetamine	3 and older
Adderall XR	amphetamine (extended release)	6 and older
Concerta	methylphenidate (long acting)	6 and older
Daytrana	methylphenidate patch	6 and older
Desoxyn	methamphetamine hydrochloride	6 and older
Dexedrine	dextroamphetamine	3 and older
Dextrostat	dextroamphetamine	3 and older
Focalin	dexmethylphenidate	6 and older
Focalin XR	dexmethylphenidate (extended release)	6 and older
Metadate ER	methylphenidate (extended release)	6 and older
Metadate CD	methylphenidate (extended release)	6 and older
Methylin	methylphenidate (oral solution & chewable tablets)	6 and older
Ritalin	methylphenidate	6 and older
Ritalin SR	methylphenidate (extended release)	6 and older
Ritalin LA	methylphenidate (long acting)	6 and older
Strattera	atomoxetine	6 and older
Vyvanse	lisdexamfetamine dimesylate	6 and older

## Appendix G

### ADULT SCREENING TOOL

# Are You Living with Adult ADHD? The questions below can help you find out.

Many adults have been living with Adult Attention-Deficit/Hyperactivity Disorder (Adult ADHD) and don't recognize it. Why? Because its symptoms are often mistaken for a stressful life.

The following questionnaire can be used as a starting point to help you recognize the signs/symptoms of Adult ADHD but is not meant to replace consultation with a trained healthcare professional. **An accurate diagnosis can only be made through a clinical evaluation.** Regardless of the questionnaire results, if you have concerns about diagnosis and treatment of Adult ADHD, please discuss your concerns with your physician.

Questionnaire is on the following page in its entirety.

**This Adult Self-Report Scale (ASRS) Screener is intended for people aged 18 years or older.**

## Adult Self-Report Scale (ASRS) Screener

Name	Date					
<i>Circle the number that best describes how you have felt and conducted yourself over the past 6 months. Please give the completed questionnaire to your healthcare professional during your next appointment to discuss the results.</i>	Never	Rarely	Sometimes	Often	Very Often	Score
1. How often do you have difficulty getting things in order when you have to do a task that requires organization?	0	1	2	3	4	
2. When you have a task that requires a lot of thought, how often do you avoid or delay getting started?	0	1	2	3	4	
3. How often are you distracted by activity or noise around you?	0	1	2	3	4	
4. How often do you leave your seat in meetings or other situations in which you are expected to remain seated?	0	1	2	3	4	
5. How often do you feel restless or fidgety?	0	1	2	3	4	
6. How often do you have difficulty waiting your turn in situations when turn taking is required?	0	1	2	3	4	
<p><i>A score of 11 points or higher indicates that your symptoms may be consistent with Adult ADHD. It may be beneficial for you to talk with your healthcare provider about an evaluation.</i></p> <p style="text-align: right;"><b>Total</b></p>						

The 6-question Adult Self-Report Scale (ASRS) Screener is a subset of the WHO's 18-question Adult ADHD Self-Report Scale (Adult ASRS) Symptom Checklist.

PRINTED IN USA. Adult Self-Report Scale (ASRS) Screener COPYRIGHT © 2003 World Health Organization (WHO). Reprinted with permission of WHO. All rights reserved.

## **Appendix H**

### **AMERICAN DISABILITIES ACT (ADA)**

Title I of the Americans with Disabilities Act of 1990 prohibits private employers, state and local governments, employment agencies and labor unions from discriminating against qualified individuals with disabilities in job application procedures, hiring, firing, advancement, compensation, job training, and other terms, conditions, and privileges of employment. The ADA covers employers with 15 or more employees, including state and local governments. It also applies to employment agencies and to labor organizations. The ADA's nondiscrimination standards also apply to federal sector employees under section 501 of the Rehabilitation Act, as amended, and its implementing rules.

An individual with a disability is a person who:

- Has a physical or mental impairment that substantially limits one or more major life activities;
- Has a record of such an impairment; or
- Is regarded as having such an impairment

#### **ADA National Network**

(800) 949-4232 (Voice/TTY)

[www.adata.org](http://www.adata.org)

### **INDIVIDUALS WITH DISABILITIES EDUCATION ACT (IDEA)**

IDEA was originally enacted by Congress in 1975 to ensure that children with disabilities have the opportunity to receive a free appropriate public education, just like other children. The law has been revised many times over the years.

The most recent amendments were passed by Congress in December 2004, with final regulations published in August 2006 (Part B for school-aged children) and in September 2011 (Part C, for babies and toddlers). So, in one sense, the law is very new, even as it has a long, detailed, and powerful history. Note- the law is especially pertinent in its description of the right to education for the disabled through age 21 and the federal requirements for implementation of the education as well as helpful information for teachers and paraprofessionals for youth who are disabled including youth and young adults with ADHD and local and state resource centers.

#### **National Dissemination Center for Children With Disabilities**

[www.nichcy.org/laws/idea](http://www.nichcy.org/laws/idea)

### **PATIENT PROTECTION & AFFORDABLE CARE ACT (OBAMACARE)**

The intent of the Patient Protection and Affordable Care Act (P.L. 111-148), as amended by the Reconciliation Act of 2010 (P.L. 111-152) (collectively referred to as the health reform law) is to expand health insurance coverage while also reforming the health care delivery system to improve quality and value. It also includes provisions to eliminate disparities in health care, strengthen public health and health care access, invest in the expansion and improvement of the health care workforce, and encourage consumer and patient wellness in both the community and the workplace. Note- the health reform law will improve medical wrap around services for those in the justice system by allowing most children and adults eligible for medicaid health services by income level (up to 133% of poverty), allowing inmates exiting facilities to sign up immediately, greatly expands coverage to include mental health services to the same level as medical services and includes community prevention and health services not previously covered by medicaid. [www.healthreformgps.org](http://www.healthreformgps.org)

## Appendix I

### THREE MODEL PROGRAMS

#### I. CHOICES (Admire, 2006)

In late 1988, the Learning Disabilities Association of Washington established and implemented the CHOICES Program to assist offenders with learning disabilities (LD) and/or Attention Deficit Disorder (ADD). For those offenders who are placed on probation, the judges of the King County District Court, Northeast Division have directed that a condition of probation requires defendants be screened and evaluated for learning disabilities and, if appropriate, complete the CHOICES Program of the Learning Disabilities Association. Failure to do so places a defendant in violation of the terms of his sentence, which can result in the imposition of jail or other punitive consequences

The program targets LD and/or ADD misdemeanor and gross misdemeanor offenders, over 17 years of age. The program provides:

1. An initial screening to determine if the client/offender has the basic tendencies, behavior and history consistent with learning and/or attentional disabilities;
2. An intake interview to determine the need and appropriateness for the program
3. A 14-week (28-hour) instructional class geared specifically toward the needs of the LD and ADD clients.

The CHOICES Program is designed to address the client's difficulties in social skills, anger management, decision making and problem solving. It also provides information on learning and attentional disabilities, offers suggestions on specific coping mechanisms and provides community resource information. A manual for clients has been developed.

As a result of the program clients become aware of the personal characteristics that are related to or the result of their LD and/or ADD, such as: getting lost, confusing right and left, being late for work or appointments, forgetfulness and/or losing things. Clients also become aware of some of the problems they may have processing information such as: difficulty in understanding or following directions, not understanding information the first time it is given, being easily distracted by background noise or having a short attention span.

The uniqueness of CHOICES is that it uses an experiential/instructional format to help the individual learn behavior, develop attitudes and foster beliefs that will enhance their opportunity to learn new innovative solutions to difficulties that have made them unsuccessful in life. Through this program individuals begin to feel successful, which is the key to motivation. They learn skills to understand their aggressive behavior, deal appropriately with their anger, make smart decisions and peacefully resolve conflicts.

After completion of the CHOICES Program, the recidivism (re-offense) records of offenders are reviewed at six months, one year, 18 months and two years post intervention. Present data indicates recidivism of 72% without the program, and a drop to only 31% for individuals who complete the entire 14-week program.

The CHOICES program benefits the offender/participants by teaching them skills to improve their social functioning and reduce their misdemeanor behavior patterns. It also benefits the court system by reducing the "clogging" that occurs with repeat misdemeanor offenders and it benefits the general public who pay taxes that fund the court process or who may be victimized by the behavior of one of these offenders.

## II. THE R&R2 ADHD OFFENDER PROGRAM (A Pro-social Competence Training Program)

This program was designed by Dr. Susan J. Young & Dr. Robert R. Ross in 2005 for the many youths and adults whose antisocial behavior or offending behavior is associated with some or all of the characteristics of Attention Deficit Hyperactivity Disorder (with or without a diagnosis). Attention deficit hyperactivity disorder (ADHD), is a neurodevelopmental disorder with core symptoms of inattention, impulsivity and hyperactivity that often result in significant impairment in academic and/or social functioning. The program has been field tested with offenders in secure forensic hospitals in England.

The program is in a manual format and highly structured. There are clear instructions for the Trainer to follow in a *Trainers Guide*. A variety of innovative training techniques are used to engage the individual and to make the 'training' fun by incorporating games, individual and group exercises, role-playing, brainstorming, audiovisual material, and participants' workbooks.

There are 15 sessions. Each session requires 90 minutes of training (with breaks) and includes out-of-class assignments. Sessions may be delivered once a week or more frequently. For more information- <http://www.cognitivecentre.ca/rr2program>

## III. THE DELAWARE ADHD CORRECTIONS PROJECT

The Attention Deficit Disorder Association (ADDA) partnered with the Delaware Center for Justice (DCJ) in 2010 to create the ADHD Corrections Project, Delaware's first re-entry initiative designed to address the specific needs of inmates with ADHD. The objective of this pilot project is to reduce recidivism by recognizing and addressing the additional obstacles faced by ex-offenders with previously undiagnosed and/or untreated symptoms of ADHD.

The ADHD Correction Project staff provides inmate and correctional staff education about ADHD, screening for ADHD, assessment/diagnosis for those screened positive for ADHD supervised by a licensed mental health professional, a 6-8 week group focused on skill building/cognitive behavioral therapy for ADHD provided by a credentialed ADHD coach and connections to community resources for support and treatment of inmates challenged with ADHD and its co-occurring disabilities in the re-entry unit in the Howard R. Young Correctional Facility, a Level V facility for men, in Wilmington, Delaware.

As part of the pilot project, detailed interviews conducted by the Corrections Project staff with inmates who screened positive for ADHD and those who screened negative for ADHD have provided important information concerning the life experiences of the two groups in terms of substance abuse, educational attainment, legal difficulties, support and social systems have shed more light on the link between ADHD and involvement with the criminal justice system. In turn, this improved understanding contributes to more appropriate rehabilitation strategies. In addition,

information from the project also is used to advocate for better correctional treatment, appropriate judicial diversion to community treatment programs and judicial understanding of the importance of early identification and treatment of ADHD as a deterrent to criminal activity. Information available on the WEB at [www.add.org](http://www.add.org) and [www.adhdjustice.add.org](http://www.adhdjustice.add.org)

The following table provides a summary of key goals, program locus, and sample programs previously discussed which are working toward these goals.

Goals	Program Locus	Sample Programs
Reduce Recidivism & improve functioning in the community	Courts	Choices
Continuity of care for persons with ADHD served in the community	Community	The Reasoning & Rehabilitation Program (Initial locus and continuing program locus.)
	----- Community Corrections	The Delaware ADHD Corrections Project (Planned expansion locus)
Enhance functioning within the correctional environment reducing rule violations and segregation admissions and improved attendance in rehabilitative programs	Correctional settings	The Reasoning & Rehabilitation Program (Program expansion)
	-----	Choices program (Program expansion)
	----- Re-entry program in corrections	----- The Delaware ADHD Corrections Project (Initial pilot project locus)



## Appendix J

### WHERE TO START?

Program development for ADHD is new to corrections. The experience and observations derived from the few programs that have been developed suggest the following:

1). Prior to initiating an ADHD treatment program, spend time reviewing current ADHD information including ADHD's impact on those who enter the justice system. If available, determine the impact of ADHD in the local jurisdiction including information such as the percentage of special education IEPs for ADHD in the local public school system and local/state treatment resources. Possible sources for this information include:

- The director of special services in the local school district
- State agencies that are responsible for making services available for school-aged children with disabilities and adults with disabilities
- The National Dissemination Center for Children with Disabilities to find comprehensive support services for infants through adults with disabilities, [www.NICHCY.org](http://www.NICHCY.org)
- National advocacy organizations for those with ADHD usually have state lists of local services providers. Examples include the following:

The Attention Deficit Disorder Association (ADDA) [www.add.org](http://www.add.org) and its new ADHD justice programs center [www.adhdjustice.add.org](http://www.adhdjustice.add.org)

Children and Adults with Attention Deficit /Hyperactivity Disorder (CHADD) [www.chadd.org](http://www.chadd.org)

National Resource Center for ADHD (NRC) [www.help4adhd.org](http://www.help4adhd.org)

2). Identify the local organizations and experts of ADHD diagnosis and treatment. Identify where school age youth are referred for treatment by the school system. Ask the local experts about their knowledge of ADHD in justice/corrections; provide resources such as those described in this white paper. Ask if they would be willing to provide expert support for the addition of ADHD screening, diagnosis, and treatment resource to the local justice/correction facility.

3). Expand the group of supporters for ADHD services within the justice/correction facility to local stakeholders including the following:

School system special education staff and administrators, adult education resources, rehabilitation experts.

Professionals such as pediatricians, psychiatrists, developmental psychiatrists and psychologists, Persons with ADHD and their families.

The next step is to provide the supporters group with information about the impact of ADHD in justice/correction settings. It is important to remember that planning and implementing a program from start to finish will require significant time, energy, and personal passion. Be patient and do not go it alone.

4). Formulate a plan of action including evaluation of the need and justification for an ADHD program where you have the most experience. For example, if you are a service provider, administrator, or professional in the court, you will be more able to start a diversion program for

ADHD within that system than trying to institute a screening program in the local jail. Plan the service focus and timeline with the stakeholders group.

5). Be willing to start small to achieve a big goal. Each of the three programs highlighted in Appendix H started in a specific segment of justice/corrections and developed a planned expansion when the original project was running and providing competent services with local treatment resources.

6). Consider a brief ADHD screening program on the focus population to get a more accurate idea of the number of initial clients who will need services. For example, if the project is court focused on those with misdemeanor charges appearing in your magistrate court, provide ADHD screening for all those coming into the court without previous charges over a typical month.

7). Develop a pilot plan for screening, diagnosis, treatment and contingencies based on 6) needs assessment, best practices, evidence based treatment, and locally available resources. Note that at this time, no standardized screening instruments for ADHD have been 'validated' on prison populations and this is a limitation that needs to be acknowledged in any published studies.

8). Obtain staff buy in through education. Facility administrators are in the best position to evaluate staff resource and re-training needs of criminal justice staff including presentence writers, designation staff, case managers, pre-release planners, and probation officers. Implementing effective screening, diagnosis, and treatment for ADHD in a correctional setting requires a collaborative process with mental health/substance abuse, security, healthcare professionals, and administrators in the facility and community mental health/ADHD service providers and law enforcement. Critical issues must be agreed upon by these professionals to define how the evidence based recommendations will be put into practice in each setting; how, how long and by whom the individual with ADHD will be monitored; and the short and long term parameters and criteria for successful rehabilitation. During implementation, the facility's security, health care policies, and procedures for services for offenders with ADHD will need to be developed along with a program evaluation and ongoing quality improvement strategies in order to create a program that benefits the facility, community and the ADHD individual.

9). Consider the skill development of current staff. The partnership of health/mental health service staff with correctional/justice staff to achieve common goals of enhanced staff/client safety and client rehabilitation by implementing evidence based treatment will enhance health service and correctional/justice professionalism. For example, correctional officers trained to monitor and work as members of the treatment team are extremely important to the few behavioral treatment programs currently in correctional facilities. In time, correctional/justice behavioral specialist may become a new professional advancement ladder for correctional/probation officers just as certification of correctional health service staff by NCCHC and ACA is rapidly expanding.

10). As more and more justice/correction organizations develop ADHD and mental health treatment programs, we are learning about the professionals and service providers who provide services to those with behavioral symptoms secondary to mental illness or disabilities. Behavioral analysts, assistant behavioral analysts, peer service assistants, coaches, ADHD coaches, mental health occupational therapists, work support aids have skills which will add value to program planning and treatment for those in custody as well as treatment services for those in the community with behavioral symptoms. (Barry, L. M., Gaines, T., 2008)

## Appendix K

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ADDA = Attention Deficit Disorder Association, [www.add.org](http://www.add.org). Office phone- 800-939-1019

Attention Deficit Disorder Association, PO Box 103, Denver, PA 17517

Copies of the White Paper are available through Kyle Dopfel, staff of the ADDA ADHD Justice Support Center at <http://adhdjustice.add.org/wordpress1/> or [kgdopfel@gmail.com](mailto:kgdopfel@gmail.com)

NCCHC = National Commission of Correctional Health Care, [www.ncchc.org](http://www.ncchc.org).

The NCCHC Guideline for Disorder Management in Correctional Settings entitled *Adolescent Attention-Deficit / Hyperactivity Disorder* contains valuable information for juvenile correction facilities in regard to establishing Quality Improvement Measures including Process and Outcome Studies and is available at [www.ncchc.org/guidelines](http://www.ncchc.org/guidelines) .

CCHP = Certified Correctional Health Professional, designation of the National Commission of Correctional Health Care